

*Chilton's*



# MOTOR AGE

OCTOBER 1950



This Issue:

## Opportunity of a Lifetime



MR. NICK L. NURSER, an average car owner who needs repairs. You know the type—everybody is out to grab his hard-earned dough. Although his car is falling apart, no repairs for him! But you can . . .

## Sell him... with the HASTINGS "CONVINCER"

This Hastings Danger Zone book has the unbeatable answers for Nick L. Nurser—and all prospects like him. It shows, with pictures, what shape his car is in . . . what repairs are necessary . . . how much they cost right now . . . and how much they will cost later if he delays having the work done.

Customers discover that your rates are fair . . . that you're actually *saving them money*.

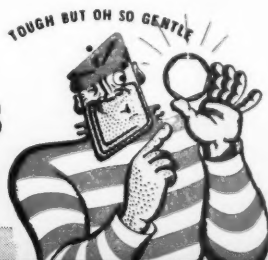
It's the sure-fire convincer—the Hastings "Convincer" that sells tune-ups, repair jobs, major overhauls. If you're not lined up with the Hastings Danger Zone program, see your jobber—NOW.

HASTINGS MANUFACTURING COMPANY • HASTINGS, MICHIGAN



# HASTINGS

## STEEL-VENT PISTON RINGS



### THE RIGHT RING FOR EVERY

Hastings STEEL-VENT is the only multi-piece steel ring that handles all three—re-bore and re-sleeve.

Hastings DUBL-CHECK sets are outstanding values in cast iron rings.



# COMPLETE SERVICE

*for Block and Radiator....*



## **PERMATEX LIQUID RADIATOR CLEANER**

the right product for tough jobs...actually dissolves rust and scale in clogged radiators and in blocks.

## **PERMATEX LIQUID RADIATOR CEMENT**

for instantly repairing leaks in radiators...permanently stops seepage in hose connections. Will not clog the system.

## **PERMATEX FORM-A-WELD**

for permanently sealing cracked blocks, cylinder heads, water jackets and split valve ports.

*When you talk Permatex...you're talking Quality!*

**PERMATEX COMPANY, INC. • BROOKLYN 35, N. Y.**

# THAT MAN IS HERE AGAIN!

Mr. "Television" himself



**MILTON BERLE**  
ON  
**TEXACO STAR**  
**THEATER**  
★  
**TOPS IN TV!**  
★

Yes, "Mr. Television" himself is back on the air, clowning his way into the hearts of millions every Tuesday night. Now in its third big season, The Texaco Star Theater holds the No. 1 spot for hilarious entertainment. Star-studded acts with none other than Milton Berle adding his terrific touch as master of ceremonies!



**SID STONE**—famous Texaco pitchman, funnier than ever. He really sells his audience Texaco products and the services of Texaco Dealers. He's tops for Texaco Dealer and Texaco product identification!

## AMERICA'S TOP TV SHOW— NOW REACHING 14 MILLION!

**E**VERY Tuesday night . . . 5 million more listeners and viewers than last fall . . . 60 stations from coast to coast . . . and more to come. To this top TV show—add magazine and outdoor advertising . . . Metropolitan Opera broadcasts . . . direct mail . . . window displays . . . and loads of other dealer sales helps.

*No wonder **TEXACO DEALERS**  
are such busy dealers!*



**A Great Line-up for  
TEXACO DEALERS**

*Sky Chief* and **FIRE-CHIEF** GASOLINES

HAVOLINE and TEXACO MOTOR OILS • MARFAK CHASSIS  
LUBRICATION • P T ANTI-FREEZE • REGISTERED REST ROOMS

# Chilton's MOTOR AGE

WITH WHICH IS COMBINED AUTOMOBILE TRADE JOURNAL

Reg. U. S. Pat. Off.

for AUTOMOTIVE SERVICEMEN

Vol. LXIX, No. 11

October, 1950

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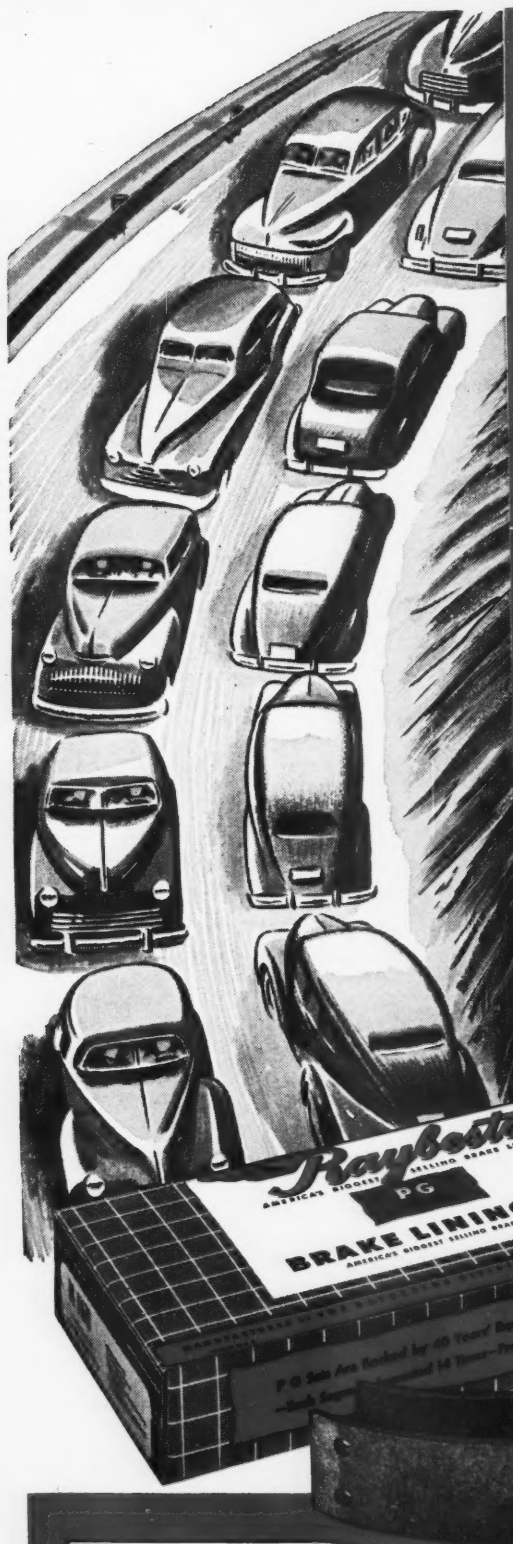
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# MORE CARS ARE STOPPED BY *Raybestos* THAN BY ANY OTHER BRAKE LINING

There's no question about it. Raybestos is America's biggest selling brake lining. Here's why: For each make and model of vehicle, there's a Raybestos PG Set in the right combination of linings, selected from seven *proving ground tested* types. Dealers everywhere know they can count on Raybestos for troublefree brake jobs, no costly comebacks. And they like the way Raybestos backs up their selling effort with full factory cooperation.



## THIS CERTIFICATE

is packaged with every Raybestos Brake Set. Use it to increase your volume of brake work.

## ... AND THIS MESSAGE

"Don't learn about bad brakes by accident!  
Have them certified safe for driving."  
features the certificate month after month in our  
Saturday Evening Post advertising.

# *Raybestos*

**America's Biggest Selling  
BRAKE LINING**

The Raybestos Division of RAYBESTOS-MANHATTAN, INC., Bridgeport, Conn.



RAYBESTOS-MANHATTAN, INC., Manufacturers of Brake Linings • Brake Blocks • Clutch Facings • Radiator Hoses • Fan Belts • Mechanical Rubber Products • Rubber Covered Equipment • Packings • Asbestos Textiles • Powdered Metal Products • Abrasive and Diamond Wheels • Bowling Balls



Going by  
leaps and  
bounds—

It certainly  
pays to  
travel with  
**MERCURY**



*"Power-Packaged"*



# CAMPBELL CHAINS

## Sell on Sight!

PREPARE yourself for fall chain profits, with an adequate stock of Campbell Tire Chains and attractive counter and window displays.

Your Campbell jobber can help you set up a sales-producing display with Campbell's attractive boxes and bags and the new point-of-purchase display. Convenient wall chart with chain sizes and prices also available.

Sell Campbell chains—the chains that sell on sight because they are safer, longer-wearing, conveniently packaged.



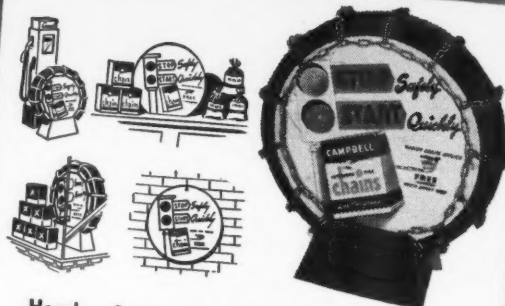
### CAMPBELL CHAIN Company

Main Office—York, Pa.

Factories—York, Pa. and West Burlington, Iowa

A Complete Line of Tire Chains for Passenger Cars, Buses, Trucks and Tractors

Another sales aid—Campbell's new consumer booklet to help you develop chain prospects and close difficult sales. Write for your FREE sample copy now.

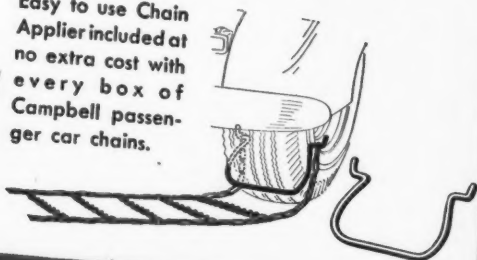


Here's Campbell's eye-catching four-way point-of-purchase display—for use outdoors, in windows, on walls and counters.

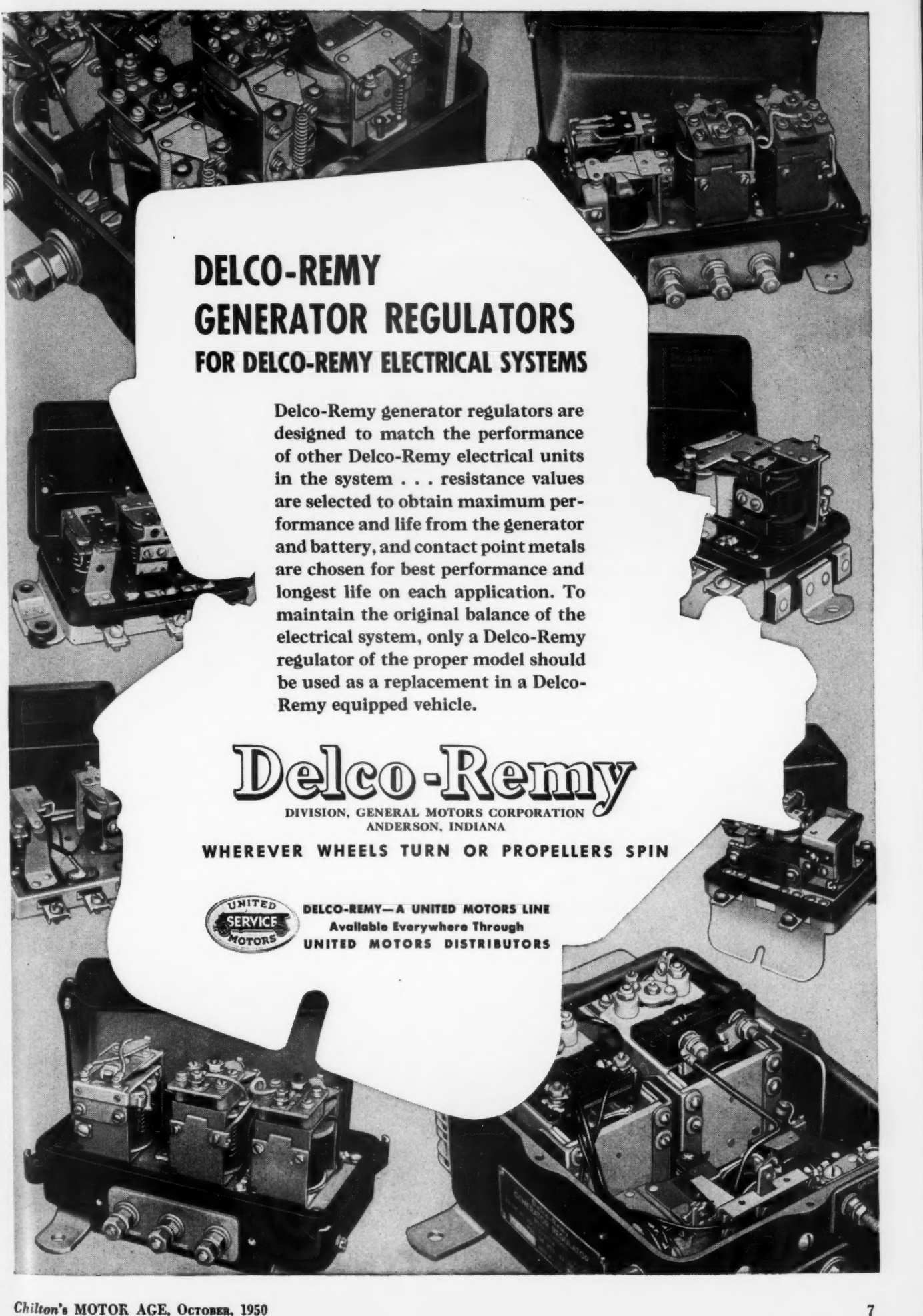
Only Campbell Tire Chains have the patented lug-reinforced construction that assures long wear and safe stopping and starting traction.



Easy to use Chain Applier included at no extra cost with every box of Campbell passenger car chains.







## **DELCO-REMY GENERATOR REGULATORS FOR DELCO-REMY ELECTRICAL SYSTEMS**

Delco-Remy generator regulators are designed to match the performance of other Delco-Remy electrical units in the system . . . resistance values are selected to obtain maximum performance and life from the generator and battery, and contact point metals are chosen for best performance and longest life on each application. To maintain the original balance of the electrical system, only a Delco-Remy regulator of the proper model should be used as a replacement in a Delco-Remy equipped vehicle.

# **Delco-Remy**

DIVISION, GENERAL MOTORS CORPORATION  
ANDERSON, INDIANA

**WHEREVER WHEELS TURN OR PROPELLERS SPIN**



**DELCO-REMY—A UNITED MOTORS LINE**  
Available Everywhere Through  
**UNITED MOTORS DISTRIBUTORS**



*Norman F. Kaplan*

PENNSYLVANIA RUBBER & SUPPLY CO.  
2819 PROSPECT AVENUE  
CLEVELAND 15, OHIO

"IN AND AROUND Cleveland everybody is talking 'Sta-ful.' Just proves what an outstanding job Auto-Lite's 'Suspense' program on network radio and television and Auto-Lite's powerful advertisements in national and farm magazines are doing," says Mr. Kaplan

who continues, "When you think of all this hard-hitting promotion plus the advantages of a big original equipment market, it's easy to understand why dealers throughout this territory are switching to Auto-Lite Batteries."



# AUTO-LITE BATTERIES







# All-American Eddie Scores 20 to 1 Win!

When a leading prizefighter quits the game and tosses his hat into the sales ring, you'd expect things to happen. And they did. Here's the story...

In the early 1920's, Eddie's battling fists carried him up to a top spot among recognized contenders for the lightweight championship of the world. He mixed leather with the top fighters of the day, and dreams of buckling the diamond-studded world champ's belt around his waist were not out of reach.

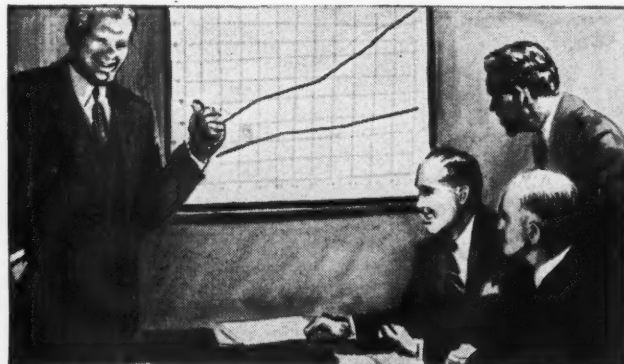
Today the name that might have made fistic headlines stretches across the spacious top of one of the finest De Soto-Plymouth dealerships in America. Hardly a month passes that a sponsored activity isn't in full swing—the Aero-Model Club—the Juvenile Golf Tourney—the Motor Speedway for kids 6 to 16—and many others. The hard work put into these activities has helped build a thriving sales and service business.

How Eddie switched from clenching fists to clinching sales involves an odd "twist." Eddie took a fall in the ring, twisted his ankle severely. Right then his wife was



tomter for life and wrote up a \$12,000 sale for two cars!

Eddie's selling ability soon won him a dealership for De Soto and Plymouth in his home territory. He set a blistering sales pace year after year, parlayed his initial year's "25-cars-sold" to 500—a 20-to-1 increase, and won from fellow dealers the nickname, "All-American Eddie."



And the man who jilted Dame Fortune at ringside to meet and win her later along Automobile Row, has plenty to say on the subject of opportunity.

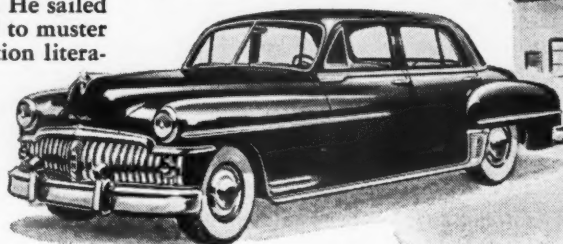
"Take it from me—anyone who wants a happy, prosperous living, and is willing to work for it, has an unlimited opportunity in the automobile business. I sure found it with De Soto and Plymouth."

Write for our free booklet containing a number of these stories of accomplishments by enterprising men. Chrysler Corporation, 341 Massachusetts Ave., Highland Park 3, Mich



expecting a child, and Eddie figured he'd better quit the ring. He couldn't see the ring as a future for a married man and family head.

So, when a friend offered him a job selling cars in a nearby suburb, Eddie grabbed the chance fast. He sailed into the new venture with all the steam he used to muster in the prize ring, gobbled up data and specification literature, pumped seasoned salesmen for all they knew, and set his sights on a new championship goal—the regional sales crown. Always quick with facts and figures, Eddie one day astounded the president of a great corporation with his data-laden comparison of the Chrysler Imperial limousine against competition. The president challenged his facts good-naturedly, said the sale depended on his accuracy. They got out the data books, and Eddie's memory hadn't failed him. That day he made a cus-



## Chrysler Corporation

PLYMOUTH • DODGE • DE SOTO • CHRYSLER • DODGE "Job-Rated" TRUCKS

Fine Cars of Great Value

Chilton's MOTOR AGE OCTOBER, 1950

## How to help customers see you in a better light

**Y**OU can bask in the light of a reputation for quality when you tell customers you're installing Timken® tapered roller bearings.

Customers know that Timken bearings are the finest you can give them. They've learned it through years of outstanding service and consistent advertising. That's why the best way to make customers see you in a better light is to . . .



*... Just tell 'em it's "TIMKEN"®*



Timken bearings are first choice with leading automobile, bus and truck manufacturers—wherever the loads are tough. They take any combination of radial and thrust loads, eliminate friction, reduce wear and keep parts in rigid alignment. Normally they last the life of the vehicle itself!

Because every step in the manufacture of Timken bearings is completely controlled by the Timken Company—from melting the fine alloy steel to final inspection of the bearings—consistent high quality is assured.

To build your reputation for high quality service, use only the best in bearings. Look for the trade-mark "Timken" stamped on every tapered roller bearing you install. **SEND FOR FREE BOOKLET:** *Timken Tapered Roller Bearings, Their Care and Maintenance*. Contains 20 pages of practical tips for mechanics, garage men and fleet operators. Write Dept. AM-10, The Timken Roller Bearing Company, Canton 6, Ohio. Cable address: "TIMROSCO".

**TIMKEN**  
TRADE MARK REG. U. S. PAT. OFF.  
**TAPERED ROLLER BEARINGS**

NOT JUST A BALL  NOT JUST A ROLLER  THE TIMKEN TAPERED ROLLER  BEARING TAKES RADIAL  AND THRUST  LOADS OR ANY COMBINATION 



**Any way you measure it . . .  
THE PEDRICK SS4 OIL RING  
will do a better job!**

**Measure the oil "trap."** This ring has the biggest reservoir for storing and draining oil.

**Measure the pressure distribution.** It is more uniform all the way around.

**Measure the spring "range" of the expander.** It takes care of a wider variation in piston groove depths, and enables the ring to conform better to taper, out-of-round and distortion.

**Measure the results.** You'll find that the SS4 ring in Pedrick Engineered Sets delivers better oil control for much longer mileage! This means more satisfied customers, and more profitable engine jobs, for you. In your next engine job, and in every engine job, install PEDRICK Engineered Sets. They're *guaranteed* by WILKENING MANUFACTURING Co., Philadelphia 42, Pa. In Canada: Wilkening Manufacturing Co. (Canada) Ltd., Toronto.

FOR 30 YEARS, SUPPLIER OF PISTON RINGS TO LEADING VEHICLE AND ENGINE MANUFACTURERS



**DISPLAY THIS SIGN**

It tells car owners that they can get PISTON RING SERVICE in your shop. Available to Pedrick Franchise Dealers.



**Pedrick**

**"HEAT-SHAPED"**

**PISTON RINGS**

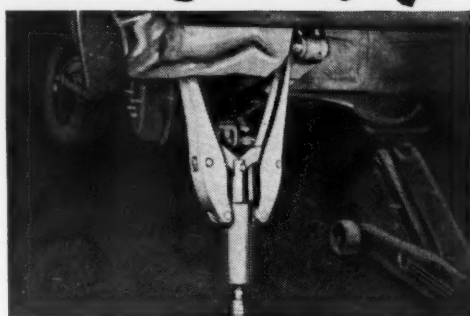


# Look what my new Bantam 'Shorty' does!



Now you can put Bantam "Porto-Power" to work where it's impossible to use hammers, pry bars or dollies! This new 2-ton ram slips into spots having only  $4\frac{7}{8}$ " clearance. It even has a  $1\frac{1}{2}$ " screw extension — to make the most of its 3" push. Use it with your regular Bantam hose and pump. Ask for No. RC-618.

# For a good pry..stick this nose into the job!



Boost profits on reconditioning and rebuilding with "Spred-Ram"! Reach into narrow, deep openings and spread with tremendous hydraulic power. Bring out crushed, deep fenders — pry smashed bodies away from frames. The Bantam or regular "Porto-Power" pump serves its built-in ram. Ask for No. SA-7.

# Here's the way to pull and stretch metal!



Pull in door posts — line up new panels — pull out light frame members — stretch and straighten fenders, panels, hoods, cowls, braces, etc. Do it all with this new Bantam "Pull-Pak" kit. Specialized clamps and chains anchor the new Pull Ram. Faster, better than any other equipment. Ask for Kit SB-46.

# It costs so little to own Porto-Power



See your jobber for attractive prices on 10-ton "Porto-Power" assortments that are complete with the new, portable ANGL-STAND! Ask for Model S-32 or the S-45 (pictured left). Now every shop can afford enough "Porto-Powers" to keep the whole crew going!

"Porto-Power" is the exclusive trade name registered product of Blackhawk Mfg. Co., Dept. P6100, Milwaukee 1, Wisconsin

# BLACKHAWK

# *Now! 100% more protection*

**Why**  
today's driving  
conditions require  
this revolutionary  
new battery

1

Car owners are driving more than ever before — and more mileage means more battery wear. Batteries must have added stamina to withstand added mileage!

2

Batteries are being charged more — not only over more miles, but, also, at higher rates. Batteries must be designed to withstand additional charging!

3

Higher compression motors are here — and they require more battery power. For quick, sure starts in any weather, batteries must have added starting power!

4

Today, batteries are under the hood — for easier, quicker inspection and service. But under-the-hood batteries must be able to withstand under-the-hood temperatures!



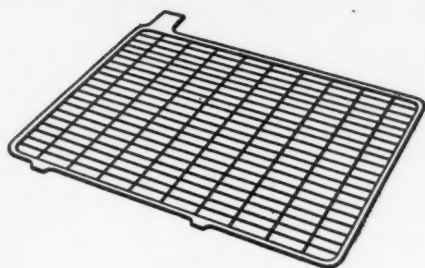
WILLARD STORAGE BATTERY COMPANY • Cleveland • St. Louis • Dallas • Memphis • Portland • Toronto

# New Willard Super

# against the No.1 battery killer

# Willard *announces*

# METALEX



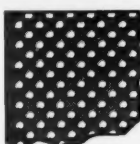

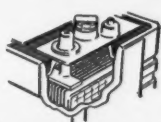

## THE METALEX GRID—

**Plus 4 other features—**  
makes the new Willard Super Master  
custom-built for today's  
driving conditions. Ask the  
Willard Salesman for  
complete details!

## greatest battery improvement in 25 years

Today, OVERCHARGING is the No. 1 battery killer. More batteries are worn out from this one cause than from all other causes combined! Overcharging strikes directly at the grids—corrodes them—fractures them—destroys their ability to retain active material—destroys their utility as current conductors.

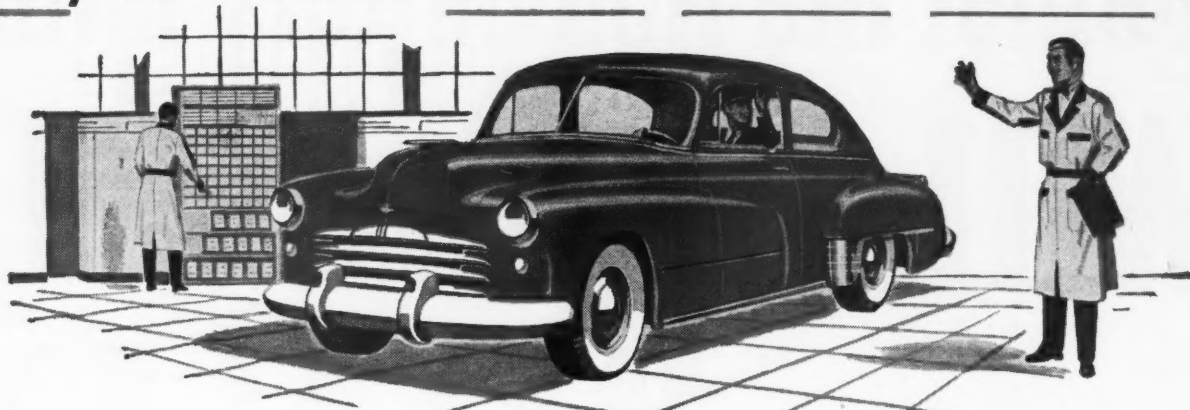
But now Willard announces METALEX—a new and vastly superior grid metal, developed and perfected by Willard metallurgists specifically to combat damage by overcharging. And METALEX does so—stubbornly, effectively. METALEX provides a full 100% more protection against the No. 1 battery killer! METALEX l-e-n-g-t-h-e-n-s battery life. Available exclusively in Willard Super Master Batteries, METALEX gives Willard Dealers the most important single selling advantage any battery has had in a quarter of a century.

<p><b>NEW</b></p> <p><b>IMPROVED RUBBER INSULATOR FOR LONGER LIFE</b></p>  <p>Impervious to effects of high charging rates and high, under-the-hood temperatures... L-e-n-g-t-h-e-n-s battery life!</p>	<p><b>NEW</b></p> <p><b>IMPROVED RUBBER CONTAINER FOR LONGER LIFE</b></p>  <p>New design—heavily reinforced at points of stress. Withstands high, under-the-hood temperatures. L-e-n-g-t-h-e-n-s battery life!</p>	<p><b>NEW</b></p> <p><b>IMPROVED SEALING COMPOUND FOR LONGER LIFE</b></p>  <p>Will neither crack in winter nor melt in summer. Withstands high, under-the-hood temperatures. L-e-n-g-t-h-e-n-s battery life!</p>	<p><b>NEW</b></p> <p><b>IMPROVED ACTIVE MATERIAL FOR QUICKER STARTS</b></p>  <p>So much more chemically active, that snap starts are assured—even in cars powered by the new higher compression motors!</p>
------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

# Master *with* METALEX



# When You Sell Stromberg Carburetors Every Job means Another Satisfied Customer...



**Stromberg**  
CARBURETORS  
*Stand for*  
**Quality!**



Stromberg\* Carburetors have long been famous for better performance, and more miles per gallon. It is also a fact, that Stromberg Carburetors *last longer*. These qualities are basically the result of exclusive engineering features, scientific design and mechanical simplicity. Therefore, when you sell a Stromberg Carburetor, you realize much more than the immediate profit on the sale; for Stromberg Carburetors go right on building good business through good will as long as they are in service.

\*REG. U. S. PAT. OFF.

**Bendix SOUTH BEND**

PRODUCTS DIVISION INDIANA  
Standard Equipment Sales: Elmira, N. Y.

...WITH

Easier Starting

Smoother Power

More Miles per Dollar!

**YOU SELL**

**PREMIUM FEATURES AT  
NO PREMIUM IN PRICE!**

**ANTI-PERCOLATOR**—A Stromberg feature which prevents waste of gasoline and hard starting when the engine is hot.

**ECON-O-METERING**—Separate and positive metering systems for the cruising range and high speed operation assures utmost economy under all conditions.

**ACCEL-ABILITY**—Positive and smooth acceleration that satisfies the most critical driver.

**BALANCED RATIO**—A sealed unit that automatically controls the amount of gasoline used in proportion to the amount of air. This means additional economy.

**SIMPLICITY**—Fewer working parts result in long wear and low maintenance costs.

*These Bendix signs stand for good business and for good business relations between factory, dealer and customer.*



Replacement Carburetors—Repair Kits



Hydrovac\* Power Brake—Trailer Power Braking Systems



Original Equipment on most cars



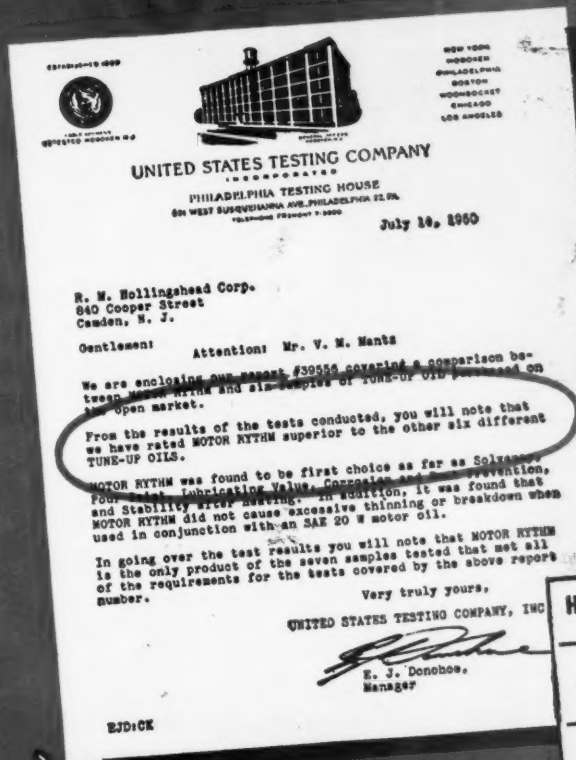
Cold Immersion Parts Cleaner saves time and money

Export Sales: Bendix International Division, 72 Fifth Avenue, N. Y. 11, N. Y.

# WHIZ MOTOR RYTHM® "SUPERIOR"

To Six Leading Tune-Up Oils Tested  
Reports UNITED STATES TESTING COMPANY

FACTS About New WHIZ Formula From America's Leading Independent Testing Laboratory



## HOW LEADING TUNE-UP OILS RATE ON ESSENTIAL TESTS

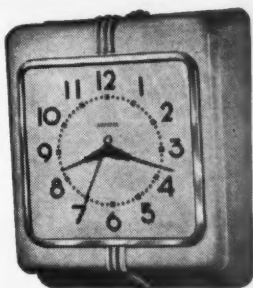
United States Testing Co., Inc., report #P39556, July 13, 1950

SEVEN LEADING BRANDS	Cleaning Action (Solvency Value)	Prevent- ing Oil Stiff- ness	Lubricat- ing Value (Film Strength)	Corrosion and Rust Loss when Heated to 300° F.	Solvent Loss when Heated to 300° F.	Compati- bility with Motor Oil	Excessive Thinning of Motor Oil?
MOTOR RYTHM	1st	1st	1st	VERY EF- FECTIVE	1st	SATIS- FACTORY	NO
BRAND A	3rd	2nd*	2nd	Almost None	4th	SATIS- FACTORY	YES
BRAND B	5th	2nd*	3rd	Little	2nd	SATIS- FACTORY	YES
BRAND C	6th	2nd*	4th*	Almost None	5th*	SATIS- FACTORY	YES
BRAND D	4th*	4th*	4th*	Almost None	6th	SATIS- FACTORY	NO
BRAND E	2nd	3rd	5th	Little	5th*	UNSATIS- FACTORY	YES
BRAND F	4th*	4th*	4th*	Almost None	3rd	SATIS- FACTORY	NO

- \*Indicates tie in rating.
- "Solvent loss when heated to 300° F." is determined by weight loss after heating.
  - "Excessive thinning" occurred where SAE 20 wt. oil was changed to SAE 10 wt.
  - 200% more protection against corrosion than most products tested.

## GET THIS EXTRA BONUS OFFER!

INGRAHAM Self-Starting ELECTRIC CLOCK. Sells everywhere for \$4.95 plus tax. For home or office use. Large 5" dial. Smart white plastic "tilted" case. Sweep second hand. 60 cycle 110-125 volt.



MOTOR RYTHM DEAL 50-P

BUY 2 cases (48 pints) @ \$10.80  
(Plus Fed. Excise Tax 18c per case) 21.96  
GET BONUS Ingraham "Sentinel"\* 4.95  
Regular Dealer Cost. ....26.91  
YOUR SPECIAL PRICE, ONLY \$21.96

\*We must reserve the right to substitute an electric clock of equal value if delivery necessitates a substitution.



Here is the complete story about seven leading brands of tune-up oils—substantiated by tests from an impartial laboratory! The above chart and full details (without brand names) will be sent to you on request.

Ask your jobber for the "TESTED-BEST"—WHIZ MOTOR RYTHM. If he cannot supply you, write direct. Special bonus offer available!

ORDER NOW FOR COLD WEATHER SALES!

R. M. HOLLINGSHEAD CORP.  
Camden 2, N. J.

LEADER IN MAINTENANCE CHEMICALS  
Canadian Offices: Toronto • Warehouse: Dallas, Tex. • Branches: Chicago

Member of N.E.M.A., N.S.P.A. and A.E.R.A.



# WINTER AHEAD



*INSTALL NEW*

# CHAMPION

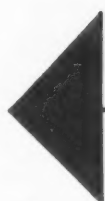
## SPARK PLUGS

To boost sales display this Champion full color poster prominently. Order from your regular jobber or Champion field representative.



**AND SO ARE THE  
BIGGEST  
SPARK  
PLUG  
PROFITS**

**IF YOU STOCK**



*America's Favorite*

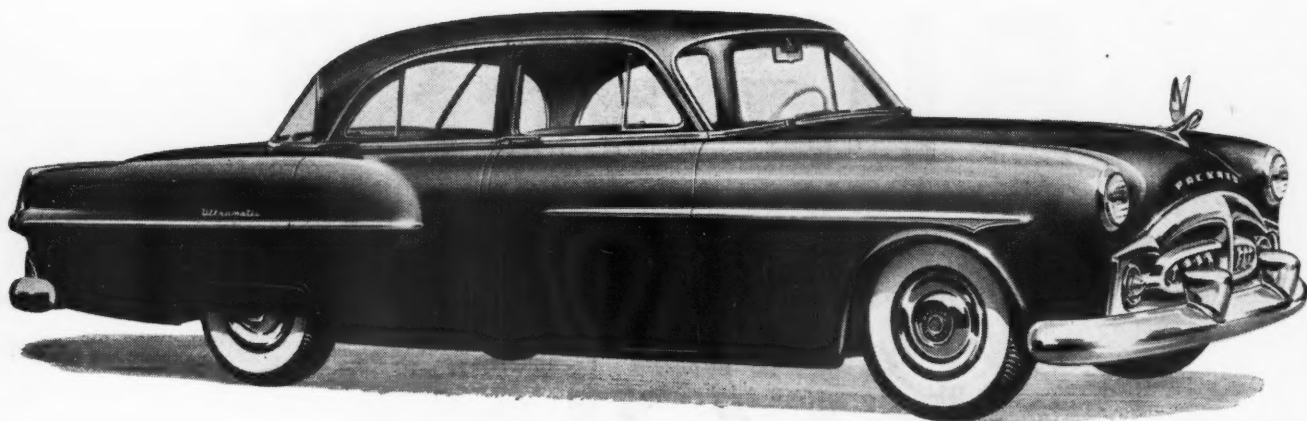
**SPARK PLUG**

**CHAMPION SPARK PLUG COMPANY, TOLEDO 1, OHIO**

*Listen to the CHAMPION ROLL CALL . . . Harry Wismer's fast sportscast every Friday night, over ABC network*

*Chilton's MOTOR AGE, OCTOBER, 1950*

Everything here is new!  
Everything new is here!



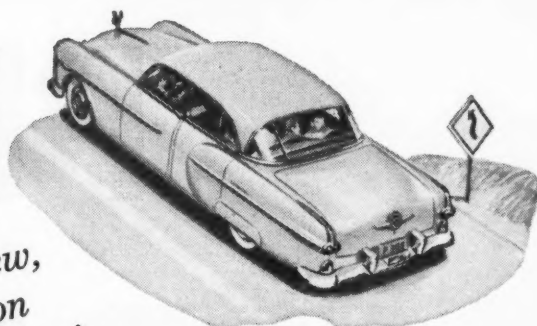
Above: 150 HP Packard '300'—one of nine exciting new models for '51

As everybody knows—it's  
the hottest new line in Packard  
history! Three brand-new  
series . . . nine exciting new models!



All with . . . daring  
new low-to-the-road  
styling! Stunning new,  
roomier, Fashion  
Forum interiors!

New restful riding comfort!  
Spectacular new performance-with-  
economy! New everything!



**WITH A DEALER FRANCHISE  
AS ADVANCED AS THE CAR ITSELF!**

You owe it to yourself to get the full story—today!  
Just pick up the phone and ask for Karl M. Greiner,  
General Sales Manager, Packard Motor Car Company,  
Detroit. (Phone WALnut 1-5600.)

It's more than a car—  
it's a

**PACKARD**  
*—the one for '51!*

ASK THE MAN WHO OWNS ONE

5-572

5-572

5-572

5-572

5-572

HAVE YOU TRIED...

**5-572?**

*IF YOU'RE INSTALLING RINGS IN CHRYSLER MADE  
AUTOMOBILES IT WILL PAY YOU TO TRY ONE  
OF THESE REMARKABLE SETS IN YOUR NEXT JOB*

## **MOOG PISTON RING SET No. 5-572**

*for 1942-50 Plymouth and Dodge Automobiles*

Repairmen have had such fine luck with this set of rings that we strongly urge you to **try just one set!** See for yourself how effectively they stop blow-by, control oil, and restore **FULL POWER.** We will gladly send you the name of nearest Moog Distributor.

Order a set of 5-572 today; available in over-size up to .080. Moog X-Plus Piston Rings give **FULL POWER** performance and stop costly comebacks.

**MOOG PISTON RING CO., ST. LOUIS 14, MO.**

Division: MOOG INDUSTRIES, INC.

*America's Fastest Growing  
Ring Line!*



**STOPS  
COSTLY  
COMEBACKS**

5-572

5-572

5-572

5-572

5-572



Smartest  
package"





\* *The NEW Auto-Lite*  
**Silver Line**

**SELLS on Sight...!**

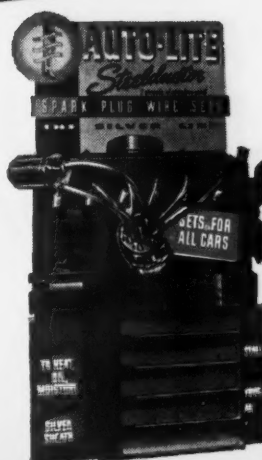
**Y**OU'LL find the new Auto-Lite "Silver Package" worth its weight in gold as it "sells up" your wire and cable sales for more profits and premium quality satisfaction. The Auto-Lite "Silver Line" is a complete line—Steelductor Spark Plug Wire, Flex-strand primary wire, Auto-Lite Battery Cable with the new Anti-Corrode Terminal that holds tight. Cut-to-length sets for all popular cars and the widest range of solderless terminals in the industry. Get in on the "Silver Package" profits. Write to

**THE ELECTRIC AUTO-LITE COMPANY**

Toronto, Ontario

Merchandising Division

Toledo 1, Ohio

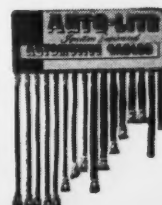


**AVAILABLE TO ALL STOCKING DEALERS**

Cash in on this new Auto-Lite "Silver Line" Wire and Cable program with this outstanding new Auto-Lite Steelductor Merchandiser. This big 25½" high, 14½" wide display in brilliant silver, red and blue colors will help spark sales and profit on your entire line. Get yours by ordering from an Auto-Lite Jobber today.

...

New Auto-Lite Battery Cable Wall Rack, 16 hooks, comes without extra cost on purchase of only \$14.95 worth of Auto-Lite Battery Cable.



# "THEY NEVER MISS ...!"

by Gum

FELIX FALSEFRONT, LIKES TO PUT ON THE DOG TO IMPRESS PEOPLE... A CHARGE ACCOUNT IS BIG STUFF TO HIM—



BUT HE DON'T IMPRESS JOE, THE SERVICE STATION MAN, AT THE END OF THE MONTH!



Copyright 1950, Prest-O-Lite Battery Company, Inc.

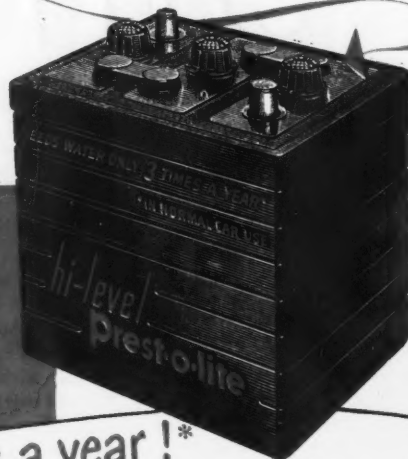
## Prest-o-lite profit plan pays off quick!

### Look How You Build Volume and Profit

- ★ **SENSATIONAL HI-LEVEL**—needs water only 3 times a year.\* 70% longer average life in tests conducted according to S.A.E. Life Cycle Standards.
- ★ **COLOR PAGES IN NATIONAL MAGAZINES**—national consumer and farm coverage in leading magazines reaching over 13,000,000 homes.
- ★ **OUTSTANDING DEALER PROGRAM**—sales stimulators, signs, counter cards and direct mail—everything you need to boost sales. See your local jobber or write to

**PREST-O-LITE BATTERY COMPANY, INC.**  
Toledo 1 Ohio

*FREE...! Cartoon Book  
Write for your copy today!*



**prest-o-lite**  
*hi-level battery*

*... needs water only 3 times a year!\**

\*In normal car use



Be sure of customer satisfaction . . . install

# MOPAR

TRADE MARK

# MUFFLERS



Phantom view showing construction details

You can install MoPar Mufflers with confidence! They're designed by Chrysler Corporation engineers for use with your customers' vehicles built by Chrysler Corporation.

Each MoPar Muffler is tuned for *maximum silencing of the particular engine for which it is designed*. Yet it permits free exhaust flow and minimizes back pressure.

Factory  
Engineered



Factory  
Inspected



Supplied by Chrysler  
Motors Parts Corporation



## LAST LONGER!

MoPar Mufflers give unusually long and dependable service because of their specially rugged, leak-proof construction.

## PROTECT AGAINST BACKFIRE!

Six partitions, welded to the shell, provide extra protection against back-fire explosion.

## STOP WHISTLING!

Slotted design of heavy-gauge steel tubes prevents whistling, no matter what the speed.

## REALLY QUIET!

Entrance to frequency chambers is so proportioned that sound waves effectively neutralize each other in MoPar Mufflers.

You can get  
MOPAR parts  
from dealers

FOR

PLYMOUTH • DODGE • DE SOTO • CHRYSLER  
CARS • DODGE "Job-Rated" TRUCKS

... and from most garages and service stations

CHRYSLER MOTORS PARTS CORPORATION • DETROIT 31, MICH.

**I.T.\*** MAKES THE DIFFERENCE

# HERE IS THE DIFFERENCE

*This is no ordinary advertisement . . . this is a message of vital importance to every automotive service man. For many years Walker has been saying—"I.T. MAKES THE DIFFERENCE."*

*This is the story of the "DIFFERENCE THAT MAKES I.T."*

\* In the large picture you will see the Free Field Chassis Dynamometer which is part of the Walker research laboratory equipment. This is no ordinary dynamometer. There are few like it in the world . . . and to our knowledge *none* in the field of exclusive exhaust system research. It was designed by Walker engineers to meet the exacting needs of Walker exhaust sound research. It cost many thousands of dollars. It is the final *difference* that makes "I.T."

\* The possession of this important piece of research equipment opens the door to exhaust system knowledge and understanding never before possible . . . unrecorded knowledge unobtainable from any other source. It makes possible the controlled laboratory testing of exhaust systems under actual simulated operating conditions . . . on the actual vehicle . . . under load . . . at high speeds . . . low speeds . . . pulling . . . floating . . . cruising . . . up hill . . . down hill. Whatever the condition to be explored, Walker engineers can duplicate it.

\* It provides the opportunity for Walker engineers to accurately check noise . . . back pres-

sure . . . resonance . . . vibration—as they will be found on the actual vehicle in actual operation. It answers exhaust system questions that before were mute and unknown. It turns a corner of knowledge others have never approached. It translates that knowledge into the superior performance you and your customers experience in Walker "Individually Tuned" Silencers.

\* To this "Mecca" of exhaust system research come engineers from many of the great car factories to obtain assistance in the solution of their exhaust system problems . . . to look into the future and analyze the exhaust sound characteristics of some new engine . . . conceived but yet unborn.

\* From this "Mecca" of exhaust system research comes your complete security in the confidence that Walker "Individually Tuned" Silencers are as carefully and accurately engineered as the vehicle upon which they will be installed. No one . . . no one anywhere is better equipped physically or mentally than Walker to build the finest exhaust systems. I.T. does make the difference.

**WALKER MANUFACTURING CO. OF WISCONSIN • RACINE, WISCONSIN**

*Walker Exhaust Silencers, Jacks, Lifts, Oil Filters*



# WALKER

INDIVIDUALLY  
TUNED

# THAT MAKES I.T.

INDIVIDUAL TUNING



Special body noise test with fan and intake silencer noise eliminated. Inside "mike" picks up body resonance and engine mounting noise. Back pressure checked under actual operation.



Pit view of special body noise test. Exhaust system mounting is completely divorced from car frame eliminating noise from car interior. Engineer is measuring tail pipe noise.



Walker and car factory engineers study Exhaust system sound problem under actual operating conditions. Solutions are better and quicker with Dynamometer than on the road.

# SILENCERS

all the power...  
without the noise



# Sell Safety on Sight!

## **GUIDE "SEALED-UNIT"**

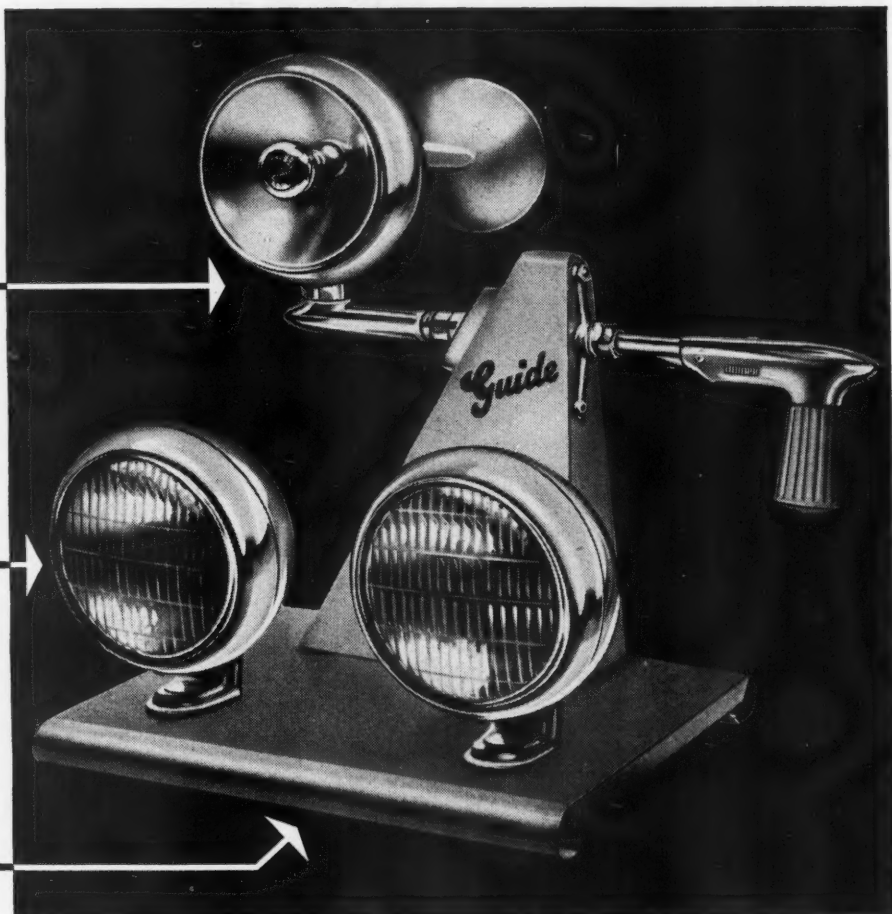
**SPOTLAMP** features smooth-working inner controls—available for post or thru-the-door mounting and with or without attached rear-view mirror.

## **GUIDE "SEALED-UNIT"**

**FOG LAMPS** are available singly or in pairs, with wiring, switch and universal mounting; fit any make of car.

## **FREE GUIDE DISPLAY**

permits easy mounting without special tools—sets off lamps to eye-catching advantage; is free with purchase of lamps.



Customers can catch at a glance the safety advantages and the sparkling beauty of Guide's brilliant Spotlamp and Fog Lamps when mounted on this attractive display. They can operate and examine them—see the amazing conveniences they offer drivers.

Guide lamps are high quality, stand-out performers . . . recognized top sellers all over the nation. And they'll move even faster—build more profits

for you—when displayed on this Guide merchandiser . . . yours free with the purchase of Guide lamps.

So *show* your way to greater profits today with this sparkling sales booster. Contact your United Motors distributor without delay.

**GUIDE LAMP—A UNITED MOTORS LINE**  
Available Everywhere Through  
**UNITED MOTORS DISTRIBUTORS**



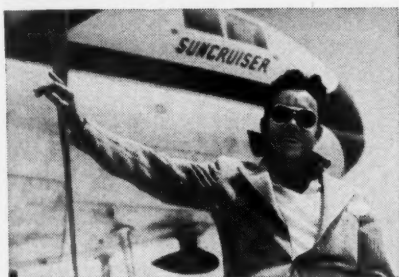
# *Guide* LAMP

Division of General Motors  
Anderson, Indiana

# High-compression Engine Owners Switching to New Blue Sunoco

*New High-test Gasoline gives New High Anti-Knock Power at Less Cost per Mile*

## USERS SAY:



**CADILLAC OWNER**—"I tried 10 gallons of New Blue Sunoco. Results? Premium performance at regular gasoline price and better mileage too." L. Burwell, Pres., Resort Airlines, N. Y. C.



**OLDSMOBILE OWNER**—"Years in the oil industry have taught me there's no finer gasoline. With New Blue Sunoco in my car I get about 3 more miles per gallon." C. L. Finefrock, Hi-Ho Court, Delray Beach, Fla.



**BUICK OWNER**—"My trip to Florida proved my car can't get the smooth performance on regular gas that it can on New Blue Sunoco—at the same price." I. Van Tassell, Detroit, Mich.

Since the introduction of New Blue Sunoco, this sensational new high-test gasoline is winning more and more motorists driving high-compression cars.

Tests and surveys prove that motorists want, and high-compression engines need, its high anti-knock power... and owners appreciate the substantial savings they get with *New Blue Sunoco* ...high-test at regular gas price.



## Memo to AUTOMOBILE DEALERS

Recommend New Blue Sunoco:

- \$ For convincing demonstrations of your new high compression engines
- \$ For positive top performance from the cars you sell
- \$ For satisfied customers
- \$ For repeat customers

It all adds up to **GREATER PROFITS FOR YOU**

## High-test at Regular Gas Price



### THIS DIMMER SWITCH DOESN'T NEED GALOSHES

Down below the floor boards where dimmer switches sit, they take frequent duckings in mud puddles and slush. For some switches, this kind of exposure is like flirting with the angels — but the Blue Streak dimmer switch takes it in its stride.

Sealed clam-tight against water and moisture, there isn't much in the way of ordinary day-in, day-out

service that can rattle this fellow. The fact is, in a laboratory test, it stood up for what amounts to 14 years of constant service. That's one long useful life for a dimmer switch. Naturally, this Blue Streak switch built for such hard wear costs a bit more, but it's worth a lot more to your reputation. Call your jobber for a supply the next time you order.

*better your business... buy **Blue Streak***

STANDARD MOTOR PRODUCTS, INC., LONG ISLAND CITY 1, NEW YORK



# THE *NEW* EXPANDED **INLAND** **LINE**



WITH

**4**

## Outstanding Sales Features

### 1 COLD RUBBER

With Inland you have today's most sensational sales advantage — new Inland Cold Rubber. Two years of actual service on the road proves that these tires deliver up to 35% more mileage.

### 2 15-MONTH WARRANTY

A written warranty adds a real clincher to your sales story. You make your own adjustments — and Inland will back you up on every adjustment made under the terms of this warranty.



### 3 COOL TWIST CORD

All Inland Tires, today, are built with the stronger 1650 denier rayon cord treated with Inland's remarkable Cool Twist method of bonding rayon to rubber, assuring maximum insulation and a cool running tire.

### 4 FRANCHISE

Inland's Franchise assures you more profit on every tire and tube you sell. It also assures you of a reliable source of supply at all times and brings you strong, aggressive advertising and selling support.

**PLUS PROFITS . . . With a top quality line of attractively packaged repair materials.**

INLAND RUBBER CORPORATION NAME \_\_\_\_\_

431 South Dearborn St. Dept. M-7 Chicago 5, Ill.

ADDRESS \_\_\_\_\_

Please send me details about the Inland Line and information on the Inland Franchise:

CITY \_\_\_\_\_ STATE \_\_\_\_\_

# MORE SPRING

*means longer life!*



**Sealed Power**  
MD-50 STEEL OIL RING

*The only ring with the*

**FULL-FLOW  
SPRING**

Extra thousands of miles  
of economical service

**Best for Oil Control even in Badly Tapered and Out-of-Round Bores**

SEALED POWER CORPORATION, MUSKEGON, MICHIGAN



**Sealed Power Piston Rings**

BEST IN NEW CARS

BEST IN OLD CARS

## MOTOR AGE

OCTOBER • 1950



South Carolina Shows Beauty in Cars . . .

# newscene..

### Car Prices

The upward trend of automobile prices touched off by Packard when it announced its 1951 models in late August now is well established. Packard raised prices \$81 to \$112 on its volume line. Kaiser-Frazer increased its prices by \$10 to \$120 on its Kaiser line Sept. 19, an increase of  $\frac{1}{2}$  to 6 per cent.

Later, Nash upped prices by  $1\frac{1}{2}$  to 5 per cent, ranging from \$29 for the Rambler series to \$77 on the Statesman and \$98 on the Ambassador series. Both K-F and Nash have been careful to point out that the price increases do not cover the full extent of increased costs. K-F pointed out that parts have risen approximately 10 per cent and labor rates about 7 per cent since the current model was introduced. It is almost certain that the other independents planning to bring out new models soon—Hudson and Studebaker—also will raise prices, and there is a good possibility that the Big Three may not wait for new models before they also increase price tags.

### Beauty Pageant

One outstanding event following the annual business meeting of the South Carolina Automobile Dealers Association at Myrtle

Beach, S. C., was their annual beauty pageant. Each line of cars had selected a beauty to represent its car.

Began with a motorcade which progressed along the Atlantic Coast line at this resort. The gals made their debut before the 800 dealers and their wives. The judging was in secret and the selection



was Miss Chevrolet, Miss Dana Coleman, daughter of Mr. and Mrs. Dan Coleman, Greenville.

Officers elected at the SCADA for the coming year were as follows:—President, J. A. Cochran, South State Motor Co., Chester, S. C.; vice-president, Curran Bridges, Bridges Motor Co., Greenville, S. C.; Secretary-Treasurer, R. C. Pulliam, Sr., Wilson Motor Co., Columbia, S. C.

### Hudson Hornet

Principal feature of the 1951 Hudson line is a new series to be called the Hudson Hornet powered by a 145 hp 6 cylinder in-line engine. Except for the different engine, the new series is identical in styling and wheelbase with the Commodore and Super lines. Hudson will also offer Hydra-Matic drive on the Hornet and Commodore Custom series as optional equipment with Hudson Supermatic Drive as optional equipment on the Super and Pacemaker Series. November MOTOR AGE will carry complete information on the new line.

### No Tire Shortage

In spite of the recent federal order restricting the consumption of new rubber, there will be passenger car tires enough for all essential civilian use, according to J. J. Newman, vice president of the B. F. Goodrich Company.

According to the rubber company, passenger car tire production in the United States this year probably will exceed the 1949 output by more than 10,000,000 units. Production in 1949 totaled 65,140,000 passenger car tires.



## newscene . . .

### Repair Parts

Prices for automotive repair parts have been inching upward month by month and the trend is likely to continue as material and labor costs climb. There have been no across-the-board increases but rather the trend has been item by item and amounts generally to about 5 per cent. Items that have been increased recently include batteries, bearings, and mufflers.

### Women Hired

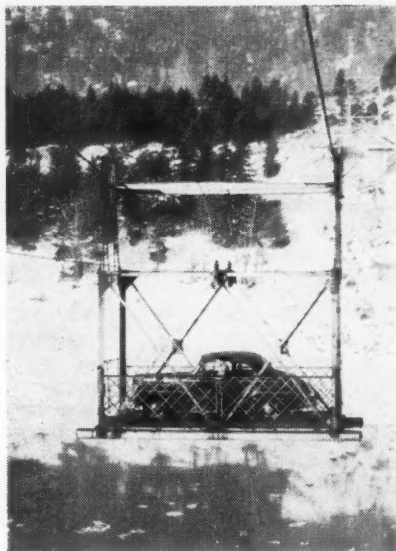
Manpower is becoming increasingly tight in Detroit and as a result women are being hired in increasing numbers. Stepped up production schedules in the automobile plants have resulted in a shortage of workers, particularly in the skilled categories. Women are being added at the rate of about 2,000 a day in Detroit, particularly for light precision operations such as small parts assembly where they are better adapted for the work than are men.

### Radio Service

Ford, over the past several months, has developed its automobile radio repair service to the point where it can be handled entirely by the dealers. All Ford dealerships are equipped to handle minor service and repair and about 325 strategically located dealers now maintain a full-time radio repairman able to handle all jobs referred to them by other Ford dealers not thus equipped. Radios are supplied to Ford from three sources—Colonial Radio, Motorola and Bendix.



Arch Hindman, manager of advertising services for Perfect Circle Corp., was recently elected president of the National Boxing Association. He has been vice-president of the NBA since 1947 and for many years previously has been active in professional and amateur boxing.



*Safe, swift, sure but scary is this unique aerial ferry in Canada. It has never lost a car.*

### Rambler Sedans

Nash has ambitious plans for its 1951 model line announced late in September. The company expects to produce 80,000 vehicles during the rest of this year, and during the 1951 model run is planning to turn out 269,000 cars. The 1950 model run totaled 171,782 units. In the Rambler line a two-door sedan will be announced later this year or early in 1951, and it is understood that a four-door model also will be produced later.

### Japanese K-F

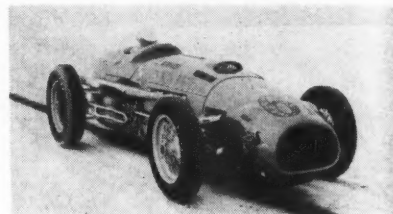
Kaiser-Frazer is negotiating an agreement which may result in production of K-F automobiles in Japan. K-F Export Corp. is negotiating with East Japan Heavy Industries Ltd. for an arrangement under which K-F would sell components to the Japanese concern which would build the cars in its own facilities. There would be no investment by K-F in the deal.

### Old-time Speed

Ab Jenkins, 67-year-old veteran speed driver, took his old Mormon Meteor III out of the museum, reconditioned it and let it roar once again. Using stock gasoline for fuel in his Curtiss-Wright V-12 engine he set 26 new world and American speed records before he called it a day. His world unlimited (International Class A) marks for 100 miles and 200 miles are 184.46 mph and 190.92 mph, respectively. In one hour of running he completed 190.68 miles.

### Diesel Dust

Jimmy Jackson recently cracked all existing world speed records for Diesel-powered cars. On the Bonneville Salt Flats he drove the Cummins Diesel Special No. 61 at



165.23 mph for one mile and established 161.92 mph for the five-mile mark. He also set a record for 10 miles of 148.14 mph. Former holder of most of the marks was Capt. George Eyston, of Great Britain.

### A.S.I. Show

"Get It From Your Jobber," the theme of the biggest sales promotion program ever conducted through wholesaler channels of the automotive service industry, will be the keynote of the 25th A. S. I. Show to be held December 4-8 at Chicago's Navy Pier.

Members of the joint operating committee for the big show, including representatives of the three sponsoring associations—Motor and Equipment Manufacturers, National Standard Parts and Motor and Equipment Wholesalers—voted unanimously last month to adopt the slogan and accept as the decoration theme of the 25th exposition the familiar symbol and program. Members of the latter group comprise the A. S. I. S. publicity and decorations committee.

Ira Saks, of Accurate Parts Mfg.

(Continued on page 94)

# Report to Our Readers

## Things You Auto Know

Pull up a chair, friend. We'd like to tell you some of the things MOTOR AGE sees and hears. An editor, you know, spends a lot of his time on the road. Talking to people, and listening, especially listening. Then he comes back to his typewriter to report to his readers. Things you AUTO know.

Sugar's back on the grocer's counter and scare buyers for automobiles have practically vanished. As Fred Haller, N.A.D.A. president, opined recently, this is a sensitive business. The market has gone from one extreme to the other in a matter of a few weeks.

Credit controls and a stupendous production of automobiles present serious problems for car dealers. Merchandising this record production—selling cars—in the face of limitations on consumer credit calls for sales aggressiveness and horsesense in trading.

## Wait 'til Next Year

Nineteen fifty-one is another story. Despite the good news from the Korean war front, the all-out strengthening of our military might is in the cards. One top-flight steelman hinted last month that sheet steel for auto makers may be off as much as 25 per cent by March 31, 1951.

But the role of the car dealer and the independent repairman in our "guns and butter" economy is clear. As in World War II the job of keeping America rolling is an urgently important one. And it looks as if they'll be doing their job with fewer mechanics, higher costs, limited availability of parts and higher taxes.



Here's a symbol we'd like you to keep in mind. Because, January 1951, MOTOR AGE will bring you full coverage of the great Automotive Service Industry Show which holds forth at Navy Pier, Chicago, Dec. 4-8, 1950. It's a jobber - manufacturer show but it results in new profit ideas for all automotive retailers.

ASIdeas



.....at work!

Somebody said, we'll all have to pitch in and do our part, or we won't have a part to pitch in.

## For Your Information

Walker A. Williams has superseded Jack Davis in the position of vice-president, Sales and Advertising for Ford. . . . In view of the war emergency, General Motors has called off its big Waldorf-Astoria show in New York City. Scheduled for next January, it was felt that an elaborate showing of this type was not propitious at this time. . . . It is predicted that the Chrysler Six engine will be used in De Soto 1951 models. . . . And, there is no indication of Dodge and De Soto adopting a V-8 engine at the present time. . . .

## South Carolinians Know How

No question about the South Carolina Automobile Dealers' Convention being a real success. There was a serious business meeting, election of officers and an auto-beauty contest. Tops in entertainment was "The Wedding Breakfast," wherein the South Carolinians proved themselves real showmen. We wish that N.A.D.A. would invite these boys to put on their show at the national meeting at Miami next January. It's first-class entertainment and the South Carolinians know how! We won't spoil the act by describing it, but only refer you to the picture at left: one is Red Cochrane, who was elected president of S.C.A.D.A., and the other is Red Cochrane, who gave a hilariously true performance at "The Wedding Breakfast."

*Frank P. Tighe*

Editor

# Service Industry News . . .



Oklahoma Chevrolet Dealers Cooperative Advertising Assoc. has contracted to broadcast all the football games of Oklahoma University, over 21 Oklahoma stations. Seated in the picture are M. E. Lane, of Greenlease-Moore, Oklahoma City, president of the association; Bud Wilkinson, Oklahoma coach; standing, Edgar T. Bell, radio station KTOK; and Ralph Bolen, Downtown Chevrolet Inc., Oklahoma City, secretary-treasurer of the association.

## Gatke

T. L. Gatke, president of the Gatke Corporation, has announced a greatly expanded sales and merchandising program. The new program will continue to channel all automotive replacement parts sales through jobbers.

S. E. "Sid" Shepard, recently appointed director of sales, reports that a new brochure, "All 7," will help their jobbers in selling their districts.

T. E. Allen, for many years connected with the AAA, joined the company earlier in the year in charge of sales promotion activities.

## E.T.I. and A.A.A.M.

On October 18 and 19 the Equipment and Tool Institute will hold its Annual General Meeting at the Detroit-Leland Hotel. The majority of automotive equipment and tool manufacturers will be represented, says V. B. Day of Bear Manufacturing Co., Committee Chairman of E.T.I.

During the afternoon and evening of the 19th a meeting and banquet co-sponsored by the A.A.A.M. Research Institute of St. Louis and E.T.I. will be held, at which the service executives of vehicle manufacturers will be the

guests of the equipment and tool builders.

H. B. Barrett of Barrett Equipment Company is Program Chairman of both meetings, and arrangements have been made for talks by important personages of both the industry and government.

## AAA Membership

The American Automobile Association membership has passed the 3 million mark, Lou E. Holland, of Kansas City, the club president, announced recently. This represents an increase of 10 per cent over the membership a year ago. The new high in membership climaxes, two months ahead of schedule, a drive launched last November.

## Dealer Week

National Automobile Dealer Week will be observed Oct. 22-28 throughout the country. The observance is to acquaint the public with the importance of the automobile dealer in his community's life.



The particular role of the dealer in national defense will be given prominence. J. Eustace Wolfington, of Philadelphia, heads the NADA Committee in charge.

## M.A.R.A.S.

George B. Shearer, Jr., of Gaul, Derr & Shearer, president of Middle Atlantic Regional Automotive Show, Inc., announced today the formation of the committee to plan for the show to be held in Philadelphia's Commercial Museum April 24 to 27, next year.

The following were appointed chairmen of committees: George P. Henderson, of Auto Gear & Parts Company, finance; Edward Ploss, of Bear Manufacturing

Company, management; R. S. Macpherson, of E. P. Rotzell Company, admissions and credentials; and John E. Rooney, Sr., of Geare-Marston, Inc., publicity.

The four chairmen comprise the executive committee, with Mr. Shearer, Charles H. Bauer, manufacturers' representative, secretary, and George L. Fischer, of J. H. McCullough & Son, treasurer, as members *ex officio* of the committee.

## AERA Convention

The 1951 convention of the Automotive Engine Rebuilders Assn. will be held in the Hotel Sherman in Chicago, May 7, 8 and 9. The rapid increase in association membership and the success of past conventions has made it necessary to seek larger convention quarters every year.

## Thompson Products

Thompson Products, Inc., has concluded a merger agreement with Perfect Circle Corp., subject to approval of Perfect Circle stockholders later this month. PC will be the second piston ring manufacturer to be incorporated into the Thompson organization recently. The reason for the merger is to round out the Thompson line. Thompson has had an oil control ring in its line but the addition of Ramsey and Perfect Circle gives complete coverage. PC will be operated as a division of Thompson with present management, sales and merchandising policies unchanged.

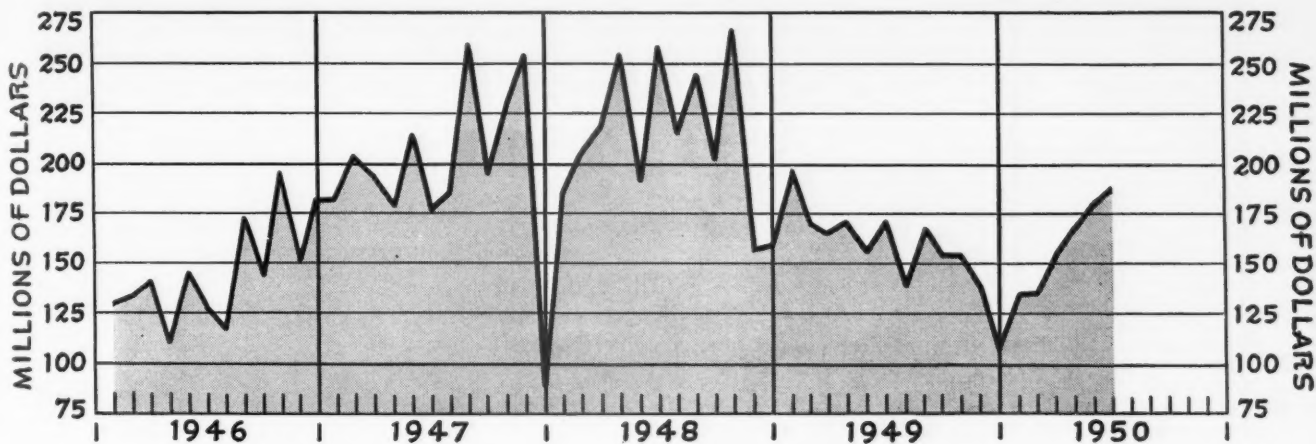
## N.A.D.A. Convention

General chairman of the 1951 National Automobile Dealers Association convention, to be held Jan. 7-10 at Miami Beach, is J. Saxton Lloyd, of Daytona Beach, Fla. Members of the program committee, who are busily preparing the most elaborate plans ever undertaken for a dealers' convention, are: Paul L. Abernathy, chairman and regional vice-president; A. M. Costley, director for Georgia; Harry McArthur, director from Mississippi; C. S. Brooking, of Gainesville, Fla.; Clarence Holtzinger, of Tampa, Fla.; Mrs. Bessie B. Ballentine, executive secretary of the

(Continued on page 114)



# BUSINESS GUIDE



## Dollar Volume of Replacement Parts and Accessories Sales

June continued the steady upward climb in the total sales of parts and accessories. The total

figure, \$187,565,650, is a gain of nine and one-half million over the month previous and well above the

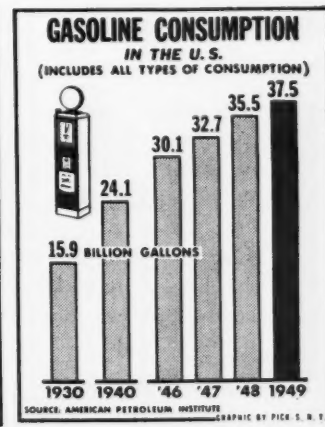
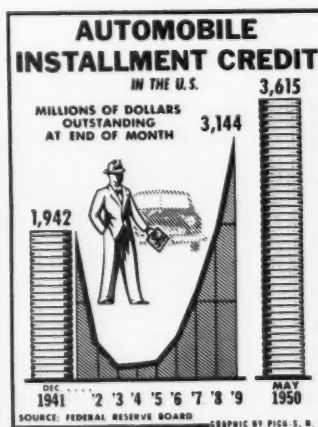
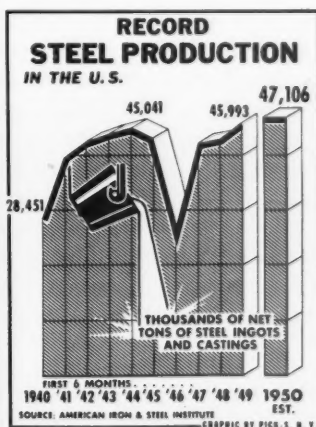
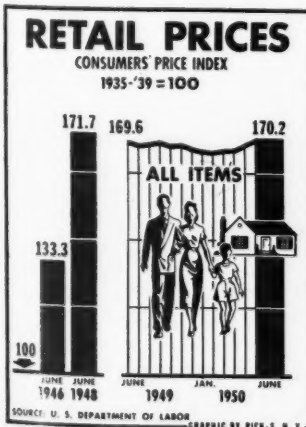
figure for a year ago. Most forecasters are now convinced that 1950 will be better than 1949.

## Indicators of Business Activity

These figures are based on latest thirty-day reports

	Latest Data	Month Before	Year Ago	Percentage Change from Month Ago	Change from Year Ago
<b>PRODUCTION</b>					
Automobiles (Units) .....	820,000	706,672	657,664	+16.0%	+24.7%
Industrial—F. R. B. Index, 1935-1939=100 .....	198	200	163	- 1.0%	+21.5%
<b>SALES</b>					
Manufacturers (\$ millions)					
Durable Goods .....	\$9,315	\$9,569	\$7,207	- 2.7%	+29.2%
Non-Durable Goods .....	\$12,436	\$11,760	\$9,907	+ 5.7%	+25.5%
Replacement Tires (Units) .....	8,049,181	6,023,930	4,488,136	+33.6%	+79.3%
Gasoline (millions of gallons) .....	3,570	3,501	3,240	+ 2.0%	+10.2%
Department Stores—Index, 1935-1939=100 .....	281	282	238	- 0.4%	+18.1%
New Cars .....	609,926	583,922	448,477	+ 4.4%	+36.0%
<b>GENERAL</b>					
Consumers' Price Index, 1935-1939=100 .....	172.5	170.2	169.6	+ 1.3%	+ 1.7%
Civilian Employment .....	62,367,000	61,214,000	59,947,000	+ 1.9%	+ 4.0%
Unemployment .....	2,500,000	3,213,000	3,689,000	-22.2%	-32.2%

## Profit Pictures . . .





The Ambassador two-door sedan. Note front end styling, and rear fender designed for a longer appearance.

# 1951 NASH

## offers Many Improvements

Styling changes, inside and out, availability of Hydra-Matic on Statesman models,

**I**N its 1951 Airflyte lines Nash Motors offers the Ambassador, Statesman, and the lower priced Rambler introduced earlier this year. The first models to be announced, Ambassador and Statesman sedans and club coupes, will sell in the low-medium and medium price classes. From the standpoint of exterior styling the major change is found in the front end and grille treatment; and the introduction of elongated rear fenders, forming streamlined rear fins. Rear fenders accentuate an appearance of greater length with a horizontal line from the front fender to the upper tip of the rear fender.

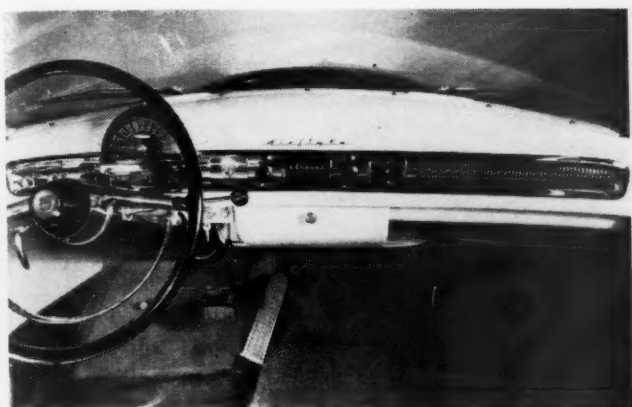
Engines remain unchanged in basic specifications but include important new details to be described later. Mechanically the 1951 models

stress changes designed to improve riding comfort and performance.

Hydra-Matic transmission, formerly offered only with Ambassador models, is now available as optional equipment in the Statesman series. Both cars also are offered with a choice of fourth-speed overdrive as optional equipment or may be had with conventional manual three-speed gear shifts.

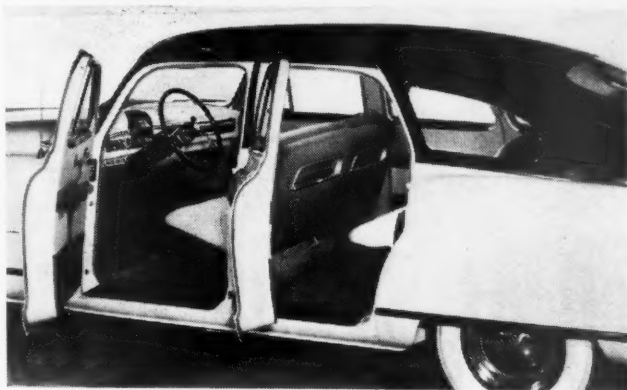
Custom model interiors offer eleven new combinations of needlepoint upholsteries and vinyl trim and moldings in harmonizing choices.

The instruments are now clustered on the panel in conventional fashion with a shroud over the speedometer to prevent light reflections. The panel now has rounded lower edges for safety. A



The instruments on the new panel are clustered together, with a shroud over the speedometer to prevent light reflection.

A wide variety of upholstery materials and colors, with vinyl trim and mouldings are featured in the new interiors.

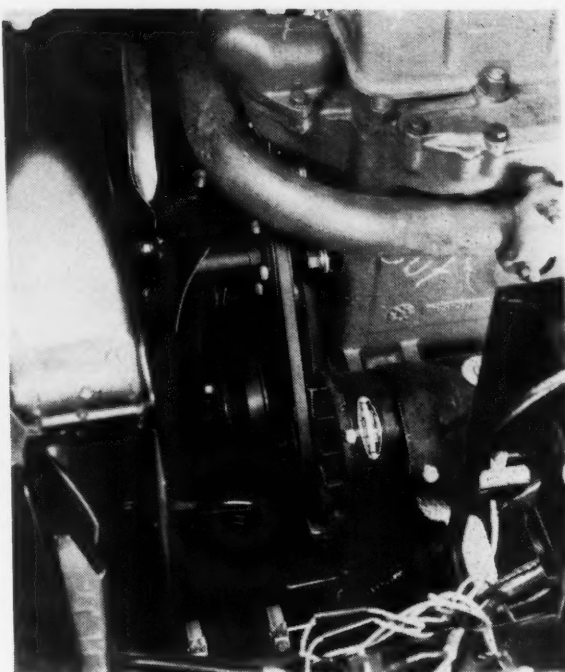


## and mechanical innovations are announced

single massive steering column jacket encloses both steering post and gear shift linkage.

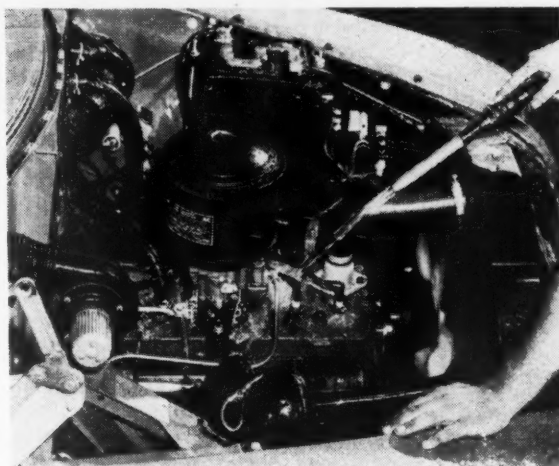
Detail improvements in the engines include the following features: On all three series, Neoprene-insulated wiring harness from the coil to the distributor, and from the distributor to the plugs. This has less tendency to crack with age and is waterproof. Statesman and Ambassador models also have a Neoprene cap over each spark plug, forming part of the insulation of the high tension lead and extending part way down the porcelain insulator. These engines also have Vinylite nipples on the distributor and coil.

The Carter YF carburetor replaces the former WA1 on Rambler and Statesman engines. It retains the Uniflow jet principle, but the float bowl



View of the engine installed in the Ambassador, showing the new narrower triangular fan belt, said to be quieter in operation and to have a longer life.

Demonstration of the waterproof ignition harness, now featured on all models. The Neoprene-insulation is used on all secondary wiring.



vent leads to a tube ending at the center of the main barrel just above the choke valve. The vent takes in clean air and is likely to remain cleaner. In addition, it compensates for changes in air-fuel ratio resulting from changing restriction in the air cleaner as well as the different pressure drop characteristics of standard and oil bath air cleaners.

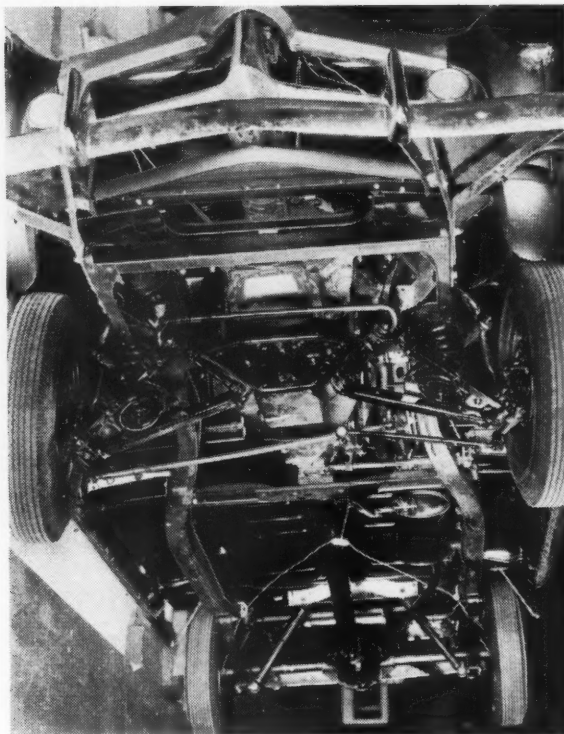
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Above. The Henry J. two-door sedan, at the present time the only body style in this series.

Right. View of the chassis from underneath. Notice the front suspension, with the direct acting shock absorbers mounted within the coil springs.



### Engine Specifications

	Four	Six
Bore (in.).....	3 $\frac{1}{8}$	3 $\frac{1}{8}$
Stroke (in.).....	4 $\frac{3}{8}$	3 $\frac{1}{2}$
Displacement (cu. in.).....	134.2	161
Compression Ratio.....	7 to 1	7 to 1
Bhp (max.).....	68 @ 4000 rpm	80 @ 3800 rpm
No. Main Bearings.....	3	4

## Henry J. Priced at \$1299

**K**AISER-FRAZER CORP. has released details on its new entry into the "low, low-priced" market, the "Henry J." Offered as a two-door sedan, the factory retail price tag has been set at \$1299 for the four-cylinder model and \$1429 for the six-cylinder model, designated as the "Henry J DeLuxe." Both the four and the six-cylinder Kaiser "Supersonic" engines are of the L-head type. A two-door convertible model will be added to the line at a later date, it is reported.

With a wheelbase of 100 inches, the car has an overall length of 174 $\frac{1}{2}$  in., maximum width of 70 in., and overall height of only 59 $\frac{5}{8}$  in. Ground clearance is 7 $\frac{3}{4}$  in. The tread is 54 in. front and rear. Leg room at the front is 42 in., and headroom is 37 $\frac{1}{2}$  in. front and 35 in. rear. Easy entry and exit is facilitated with 57-in. doors.

Special features include fuel economy expectancy of around 30 mpg, low cost replacement parts, and low upkeep. Another important economy feature is the fact that all fenders are bolted on, thus making replacement a simple matter in event of collision damage.

Interesting production feature of this car is a single roof panel extending from the cowl down to the rear edge of the body, eliminating the usual trunk lid. Luggage is loaded from the interior of the car, loading being facilitated by the wide door opening. Where cargo capacity is important, the rear seat is arranged to fold forward to become a part of the trunk floor. This provides luggage capacity of 50.3 cu. ft. With the rear seat left in conventional position, luggage capacity is 19 cu. ft.

Coming to the basic mechanical details of the car, it is noteworthy that the customer has an option of either a four or six-cylinder L-head engine, both engines being supplied to K-F by Willys-Overland and built to K-F specifications.

The engines have positive crankcase ventilation, through the air cleaner and into the intake manifold. Both engines have unusual smoothness with the use of fully counterweighted crankshafts. The Four has four counterweights; the Six, seven counterweights.

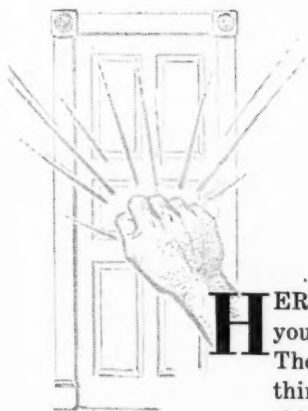
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Window Decal. Here is the slogan and emblem for your shop window.



# OPPORTUNITY of a Lifetime

First of Two Articles on New Advertising  
Campaign Offered by Automotive Advertisers  
Council to Build Business and Profit for You



**H**ERE'S a new plan to help you sell service and repairs. There has never been anything like it in the history of this business. Whether your business is big or small—car dealer or independent—this program is aimed to stimulate sales of an urgently needed automotive commodity—your business, your know-how, your service! In fewer words, this plan should help keep cars rolling in the war emergency days ahead.

It has been designed by the best advertising minds in the automotive service industry and its objective is to sell service for your particular

shop or service department. It was introduced today (Oct. 10) in Chicago by the Automotive Advertisers Council, a group of prominent automotive advertising men, whose collective talent has developed "a full-scale, business-building program for automotive retailers in the United States and Canada."

It's a year 'round sales booster campaign consisting of direct mail advertising pieces, four-color "point-of-sales" posters, signs, decals, newspaper ads, radio spots and other material. And, one important thing: There's nobody's axe to grind but YOURS.

by  
**Frank P. Tighe**  
Editor

# ... Nobody's Axe to Grind but YOUR OWN



**E**XAMINE these advertisements carefully. They're yours. They promote the brands of merchandise—the parts, accessories, supplies and service equipment—that you sell to your customers.

And, incidentally, this is only a part of the campaign.

Other helpful material will be illustrated in next month's issue of MOTOR AGE.

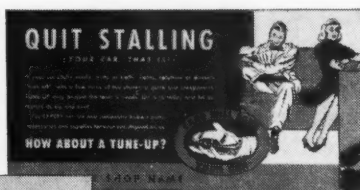
If you're a good service salesman, if you're doing a satisfactory volume of business, this campaign, properly used and regularly used, could up your service volume and increase your customer contacts. Because it is designed to operate

all the year through—winter, spring, summer and fall.

First, you have a slogan to attract, alert and advise every car owner within your own trading area. It is: "Care Will Save Your Car." Now, in cold type that mightn't fire your imagination but the same slogan emblemized in a three-color decal on your store window, your shop door or your tow truck will be a permanent advertiser for your business.

Second, you have big, four-color posters to place in the most prominent spot in your shop or service department. They're well done. Seasonal in ad message and illustration, and you can rotate them from time to time. They'll help

(Continued on page 106)



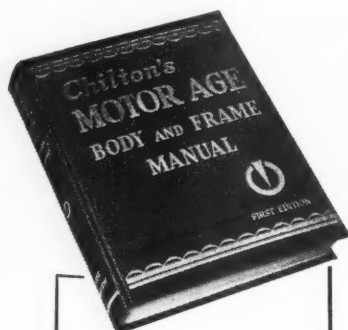




Four color posters (above) for use in your shop window or at the point where you meet and greet your customers. Six piece mail campaign (left) imprinted with your name and mailed to your customers at regular intervals.

# "Out, Out Damned Spot!"

W. Shakespeare



Other helpful information of this type is available in Chilton's Motor Age Body and Frame Manual

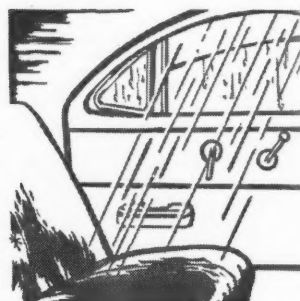
**C**AR OWNERS can be offered six good reasons for maintaining clean upholstery in their cars. (1) Certain kinds of spots speed up deterioration of the fabric. (2) Poorly kept upholstery reduces the trade-in value of the car. (3) Dirty upholstery spoils the appearance of a car. (4) Sitting on dirty seats increases cleaning bills. (5) Dirt carries germs. (6) Dirty upholstery imparts an unpleasant odor to the interior.

Bearing these points in mind, repair shops can sell a useful service by offering a complete upholstery cleaning service which would include removing spots, cleaning and rendering the upholstery sanitary. The job could be done at little cost to the shop, and in a few hours time on all but the worst cases.

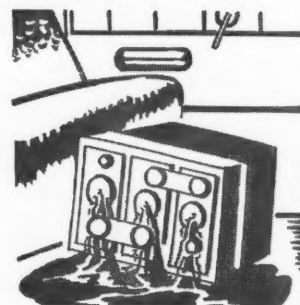
First, publicize the service being offered. Post signs in the shop describing the service and suggesting a free estimate. Also, mention it to customers while they are in the shop, and discuss the reasons for having the car "sanitized". Then

(Continued on page 77)

**WATER SPOTS.** Sponge the entire panel with a cloth dampened with cold water. Then sponge the spots with cleaning fluid. Finally whisk broom the entire area.



**BATTERY ACID.** Pour household ammonia on the spot, and allow it to remain for about a minute. Rinse the area with cold water and brush with a whisk broom. Battery acids must be removed immediately to prevent serious damage to the upholstery.

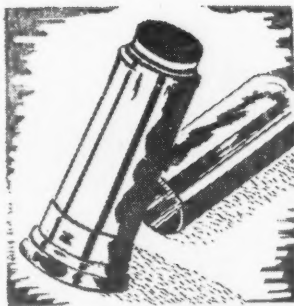


**CANDY STAINS.** Chocolate stains are best removed by rubbing with a cloth dampened with luke warm water, then sponging with a good cleaning fluid. Do not use hot water on chocolate stains. However, if the stain does not contain chocolate, hot water can be used, then finish with cleaning fluid.



**URINE.** Sponge the stain with a clean cloth wet with warm soap suds made with neutral soap. Then rinse with a clean cloth and rub the spot with a solution of 1 part household ammonia and 5 parts of water. Then rub off with a clean wet cloth.





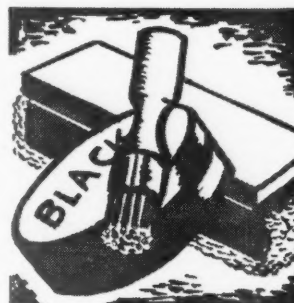
**LIPSTICK.** Good cleaning fluid or carbon tetrachloride should be generously applied to the area, then blotted immediately with a clean blotter. Continue saturating and blotting until the spot is removed. Do not rub.



**NAUSEA STAINS AND MILK STAINS.** Use warm neutral soap suds, sponging the area until the stain is removed. After the fabric has been cleaned brush briskly with a whisk broom.



**DOG AND CAT HAIR.** Use a stiff sponge moistened with water to gather the hair in a lump. After the hair has been brushed into a pile, it can easily be picked off. Finally brush the area with a stiff whisk broom.

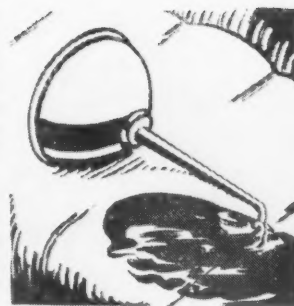


**SHOE POLISH STAINS.** A good cleaning fluid, white unleaded gasoline or carbon tetrachloride can be used to remove any color shoe polish except white. White polish is removed by brushing with a whisk broom. If necessary, moisten the spot with cold water, allow to dry, and brush it again.



**INK.** Sponge the area, from the outside toward the center, with cold water. If this does not remove the spot, apply No. 1 Solution Ink Eradicator with an eye dropper, and blot with a clean white blotter. Repeat this until the stain is removed. Then sponge with cold water. (Do not use No. 2 solution, as it may bleach the fabric.)

**OIL and GREASE STAINS.** Any approved cleaning fluid, white unleaded gasoline or carbon tetrachloride is also suitable. On upholstery where the fabric is saturated with oil, pour the fluid on the spot and soak it up with a clean white blotter. (Not recommended with rubber padding) Finally, clean the area with a cloth dampened with fluid.



**BLOOD STAINS.** Dampen a clean cloth with cold water and rub the stain, working in a circle from the outside in. If this doesn't remove the stain, pour ammonia on the spot and rub with a clean cloth. Never use hot water as this will set a blood stain.



**CHEWING GUM.** Moisten the gum with any good cleaning fluid, white unleaded gasoline or carbon tetrachloride. Scrape off with a dull knife and then finish the job with cleaning fluid on a rag. Another method is to apply dry ice to the spot until the gum becomes brittle, after which it can be scraped off.



**RESTORING THE NAP ON MOHAIR.** The pile can be raised on fabric of this type by running a hot iron over a damp cloth placed on the matted area. The steam will restore life to the pile, causing it to stand up. If the surface is badly matted, the process may have to be repeated several times.



**PAINT.** Clean turpentine can be used to loosen paint, after which the remainder can be removed with carbon tetrachloride or a good cleaning fluid. Work toward the center of the area, so as not to spread the damage. Don't use a strong paint remover.







Fortunately they were on the opposite side of the street or Larry's swerving car would have come dangerously close.

## Pop Springs a Surprise

**P**OP O'NEILL saw the maroon Pontiac draw up in front of the big doors of his repair shop. He started to rise from his desk to go out because he knew that Tommy had not yet returned from his trip down to the jobbers. Before he had time to straighten his back, however, a long blast on the horn reached his ears. The man kept his hand right on the ring until Pop reached the side of his car.

"Thought you were all dead around here," snapped the driver sarcastically. "If you didn't have such a good reputation I'd just drive off."

"Thanks for the compliment," Pop replied with a polite smile. "The second one that is. What can we do for you?"

"Fix my car," snorted the lean-faced customer. "What else could you do?"

Pop had learned from long years of experience that arguments with customers never pay off, so

he ignored the challenge. "What seems to be your trouble?"

"Trouble!" the stranger pushed his light grey hat way back on his head as though he were looking for a fight. "I've had nothin' but trouble. This car's a lemon. Just a plain lemon. It's no damn good."

"Engine sounds pretty good to me," Pop remarked softly. "Paint job's a dandy, even if I didn't do it myself. Interior's neat, clean. Looks more like a peach than a lemon to me."

Apparently Pop had hit the right note. The old gentleman had spent considerable time in cleaning and polishing his car. "It does look pretty nice," he admitted in a calmer tone. "But it doesn't steer right. It weaves all over the road."

Pop's face broke into a smile of relief. "Is that all that's wrong with it?"



Pop O'Neill

**A weaving car and a worrying owner have  
Larry scratching his head, but Pop applies  
practical physics to the problem and puts  
both the car and owner back on the beam**

**by Charles M. Kenyon**  
Managing Editor

"That's enough," retorted the man. "I've had four different places check the front end already. But it doesn't do a bit of good."

"Leave it to us," said Pop confidently. He beckoned to Larry Tate. "Larry will take care of you," he said to the customer. "He's a good mechanic."

Larry's first move was to put the Pontiac on the front end stand and give it a thorough check, while the lanky old man hovered over his shoulder, demanding that he find something wrong. He didn't. Caster, camber, toe-in were all right on the beam. He checked the linkage for wear. There was none apparent.

"You see!" crowed the customer triumphantly. "There's nothing wrong. Just as I told that old fellow, it's a lemon!"

"No, it's not," Larry absent-mindedly took off his cap and rubbed his head with a greasy hand.

"Lemon's just grow on trees. We can fix any car that ever went bad. And fix it right. Wait till I wash my hands, an' we'll take a ride in this one."

"Don't believe me, hey, young fellow," the old man fixed his steely eyes on Larry. "Let me tell you one thing. I know what I'm talking about." He nodded his head vigorously to prove his point.

"Glad to hear it, old-timer," murmured Larry as he walked toward the washstand. "Say, Pop," he called as he dried his hands on what had once been a towel. "We're taking a ride. I want to see this one wander."

"Everything looks OK, does it?" Pop asked. "Well, better try it out then."

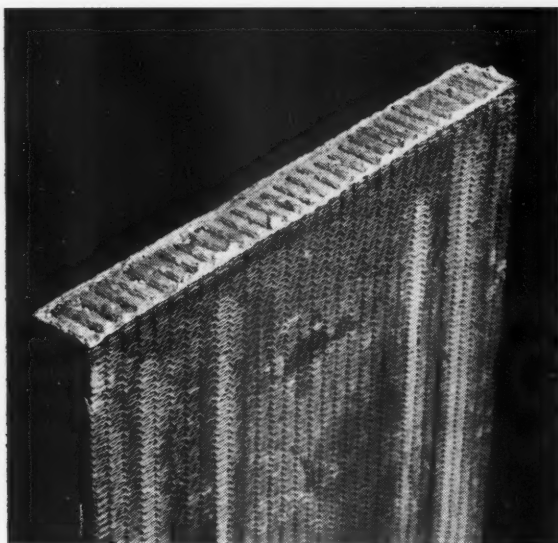
Larry and his acidulous companion backed out and started up the road. "Some load you carry in the back seat there," Larry commented as he jerked his thumb toward the black leather cases on the floor and seat.

"You bet," the old man inserted a cigarette in a long black holder and lit it. "Big line I represent, an' I believe in showing people what they'll get when they buy. All samples."

They picked up speed and Larry twisted the steering wheel with a few experimental tugs. Then he settled down to straight driving. When he hit about 45, the weaving became obvious. The car just did not handle right. "Sort of like steer-

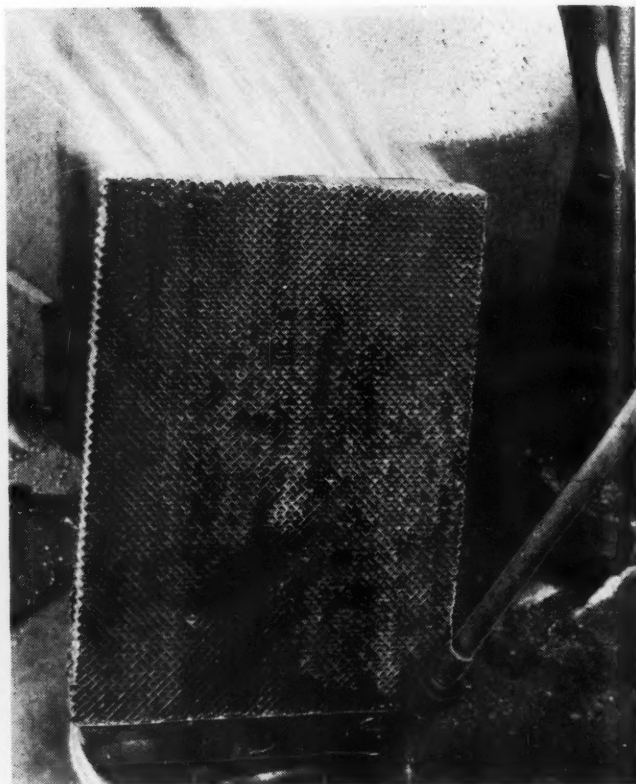
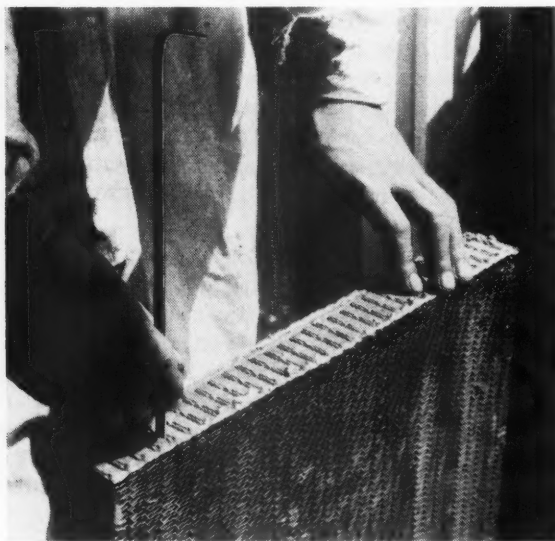
*(Continued on page 82)*

Serious radiator clogging necessitates special techniques and equipment to correct the condition. Here's how a specialist cleans badly clogged cores



A badly clogged radiator core. Notice the amount of scale and particles which has covered the water passages.

View of core being rodded out. Each of the water passages has to be rodded separately.



Water being applied under pressure to force all dirt out of the passages.

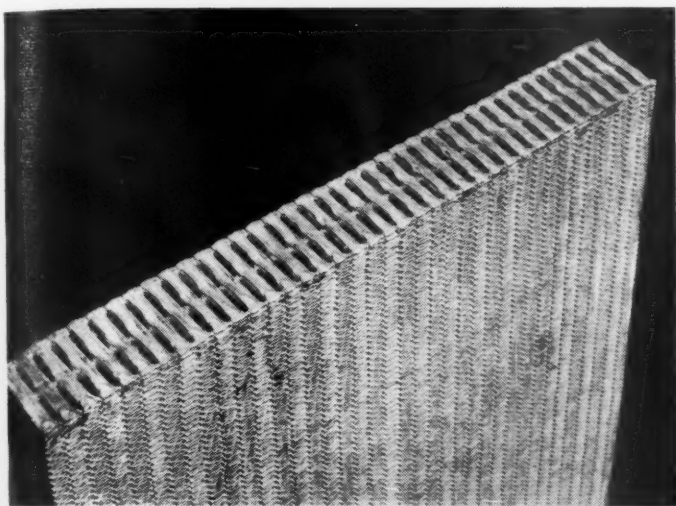
## Cleaning and

**W**HEN overheating occurs on cars which are two years old or more, the chances are that the radiator is at fault. In most cases poor circulation is caused by particles forming across the top of the core, which in turn restricts the water flow through the core. Due to the direction of circulation, any rust or scale is sucked out of the block into the top of the core.

The radiator usually can be cleaned with a good chemical or mechanical cleaner, but not in stubborn cases. That is where the specialist comes in. John Carr, owner of Carr's Radiator Service in Philadelphia, has developed a sizable business as a specialist in cleaning and recoring radiators. Carr believes that the method given here is the



by Jack Montgomery  
Technical Editor



Top. View of core which has been rodded and cleaned and is ready for the tank installation.



Above. The upper radiator tank in place and the solder job being completed.

# d Recoring Radiators

most practical and surest way of doing a first class job to a badly blocked radiator. He offers one-day service and can do anything that might be necessary in that time.

When cleaning a cooling system still mounted on the chassis it is important to use hot water or to keep the engine running and the radiator covered so that the temperature will be high enough to keep the thermostats open. A better plan is to remove the thermostats and then flush the system before replacing them. When the thermostats are out they should be checked for opening at the right temperature.

Internal leakage can be checked by the following method: Disconnect the top hose, remove the

thermostats, disconnect the pump and fill the system until water flows out of the top hose. Start the engine and put it under a slight load, then watch for air bubbles or sudden overflowing before boiling actually starts. If bubbles are present, look for a leaky head gasket or a faulty water pump.

To be sure of a first class job Carr doesn't miss a trick. He removes the top tank and rods out the passages. Then after thorough flushing, he applies water under pressure to the bottom of tank, at the same time noting the water flow at the top. On cores that are clogged with grease and gum, he submerges them in a special tank

*(Continued on page 78)*

# Neglected Wires Cause

## Motor Age Editorial Investigation of 1940-47 Cars Proves That

- 5 out of 10 need light wires
- 6 out of 10 need battery cables
- 2.5 out of 10 need ignition wiring

**L**AST month MOTOR AGE conducted an extensive "under the hood" survey to determine the actual condition of battery cables, lighting and ignition wiring on all makes of cars, 1940 through 1947. The results were astonishing. Not only did our editorial investigation dig up some pertinent facts on the need for \$200,000,000 worth of wire and cable replacement, but with the aid of insurance experts it was disclosed that from 35 to 92 per cent (in differing company reports) of all car fires were caused by defective wiring or faulty cables.

Consider then, this great, hazardous waste. Motor vehicle fires in 1948 caused damages of \$10,000,000. And much of this could have been prevented by the simple expedient of checking wires and cables of every car on which you or your mechanics work.

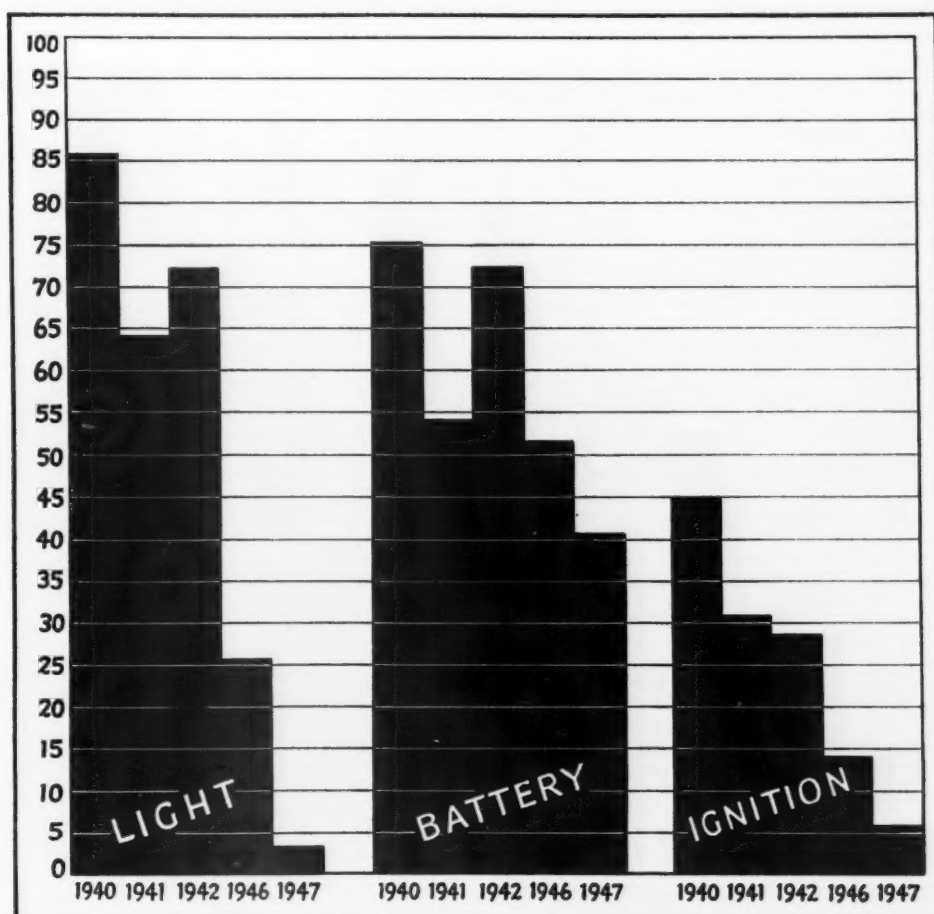
A careful wire examination may save a customer's car. If he owns a 1940 model, chances



are 86 out of 100 that he needs light or miscellaneous wiring, 75 out of 100 that he needs a battery cable, and 45 out of 100 that his ignition wiring needs replacing. In fact, his wiring only has a 9 per cent chance of being completely satisfactory.

As can be seen from the graph, models even as new as 1947 need replacement wires. For instance, 40.6 per cent of the 1947 cars examined on the survey were found with battery cables which had insulation worn through. Only 51.9 per cent of the 1947 models had good wiring.

# Fires



The graph below illustrates the results of the Motor Age editorial investigation, showing percentages of cars by year of manufacture requiring replacement of wires and cables.

by  
Frank P. Tighe  
and  
Arthur H. Nellen, Jr.

MOTOR AGE editors went into repair shops, service departments, parking lots and used car lots. The cross section was typical and here's what they found. Of all 1940 to 1947 cars examined:

Five out of 10 needed light wires.

Six out of 10 needed battery cables.

Two and one-half out of 10 needed ignition wiring.

By year of manufacture:

	1940	1941	1942	1946	1947
Per cent needing light wires	86	64	73.1	25.7	3.8
Per cent needing battery cables	75	54.7	73.1	51	40.6
Per cent needing ignition harness	45	31.2	28.8	14.8	6.7

Based on the MOTOR AGE editorial investigation, six and one-half million 1940-1947 cars on the road need lighting wires and chassis harness. This represents a service volume (parts and labor) of almost \$175,000,000. Three and one-third million cars in the same year category represent a possible sale of over \$35,000,000 worth of battery cables including parts and labor. Over three million four hundred thousand cars between the years of 1940 and 1947 need ignition harness replacements. Consequently there is a replacement market of over \$18,000,000. This adds up to over 2¼ million dollars' worth of replacement wiring and cable business.

Aside from the profit angle, there is this to consider. Every day hundreds of cars burn because of defective wiring. During 1949 in Chicago, according to the safety council, 3633 motor vehicles caught fire, 2298 of these fires were due to faulty wiring. The previous year, Chicago had 3910 motor vehicle fires, of which 3590 were due to faulty wiring. In New York City, 6180

(Continued on page 94)





Fig. 1. The stock pile of shock absorbers and knee action units which are to be rebuilt.

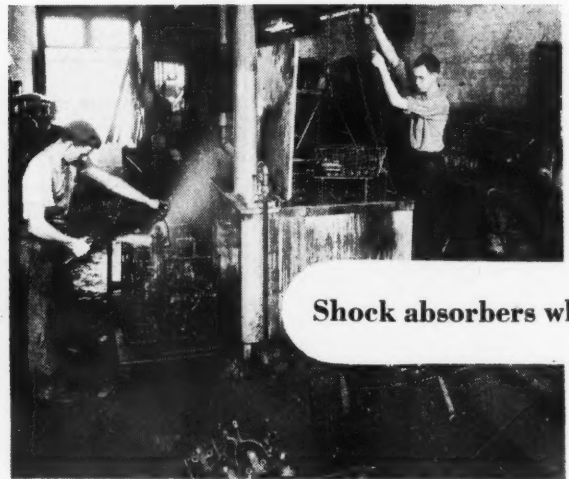


Fig. 2. Cleaning the shock absorbers before they are put on the rebuilding line.

Fig. 3. Separating the control arm from the shock absorber on a heavy duty electric press.

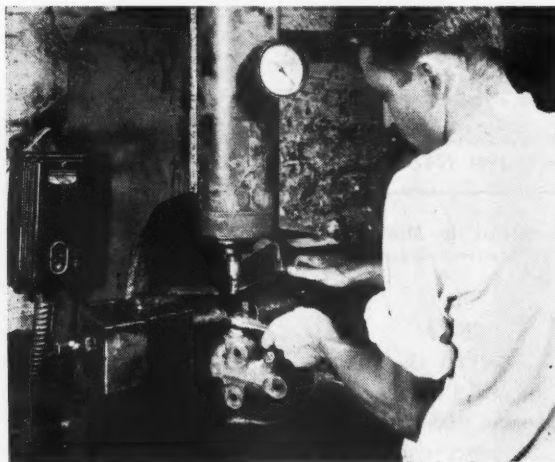


Fig. 5. Finishing the cylinder bore for a proper fit on a wet honing machine.



Fig. 4. Internal parts of the shock absorber after the unit has been completely disassembled.

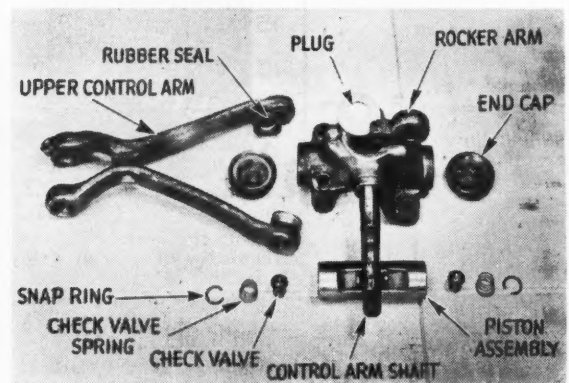
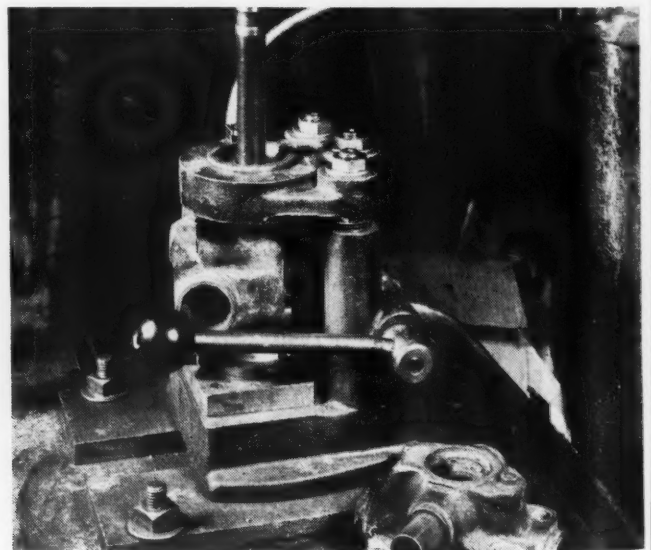


Fig. 6. Line-reaming the housing so that oversize control arm shaft bushings can be installed.



# New Life for Dead Shocks

have outlived their usefulness are rebuilt on an assembly line such as is described here

by Arthur H. Nellen, Jr., Service Editor

**F**IVE parts wear out in double-action shock absorber: the pistons, check valves, shaft, bushings and rubber seals. To rebuild a shock properly, these parts must be replaced and quantity rebuilding requires "mass-production" methods. Illustrated here is the procedure used in the shop of Van-Bergen Greener Co. of Pa., Inc. According to P. J. Henderson, a partner of the firm, 1700 of the small double action type units are turned out each month using the methods described and illustrated here.

All units of one type are taken from the stock pile and run through the line together. This increases the efficiency of the operation by making

all parts, jigs and tools handy. Note in Fig. 2, that a large cleaning vat is used for the initial cleaning. The air-water gun at the left is used to clean the finished product before painting.

The shock absorber is then placed in a heavy duty electric press and the control arm removed from the splined shaft, Fig. 3. This operation requires a special jig and pressures of over ten tons.

After the arm is removed the end caps and plug are removed and the check valves and springs taken out. The shaft is then forced out on the electric press. Once the shaft is out, the remaining internal parts, the piston and cam (or rocker arm) can be removed. (Fig. 4.)

Then on a wet honing machine, the cylinder bore is honed to a proper fit and given a satin-smooth finish so that the new pistons will just  
(Continued on page 80)

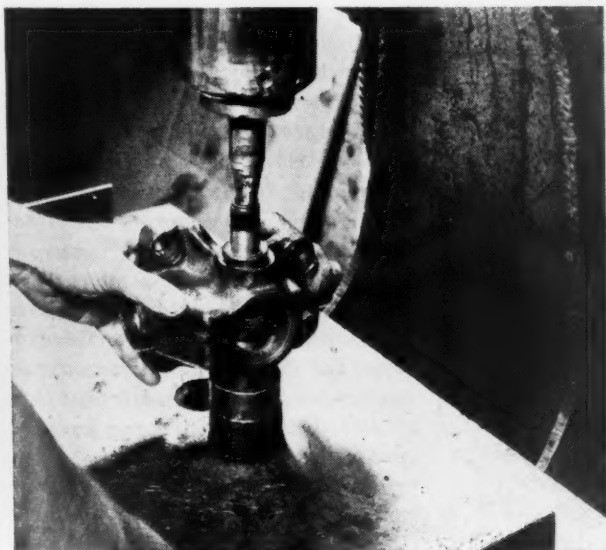
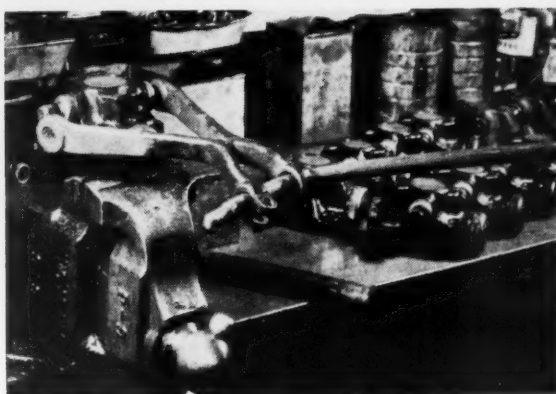


Fig. 7. Installing the control arm shaft on a heavy duty electric press.

Fig. 8. Using a crow bar to pull the control arm into position on its shaft.



# CLEARING HOUSE

## FOR SERVICEMEN'S QUERIES



**TROUBLE SHOOTING WITH JACK MONTGOMERY, Technical Editor**

- Chevrolet Fouls Spark Plugs
- Lincoln is Sluggish and Burns Oil
- Gas Gage Troubles on Studebaker
- Maximum Performance At Minimum Cost
- Low Speed Miss on Mercury
- Chrysler Has Noise in Transmission
- Overdrive Installation in Lincoln
- Buick Runs Hot in Traffic
- Starter Acts Sluggish on Chevrolet

### Chevrolet Continues to Foul Spark Plugs

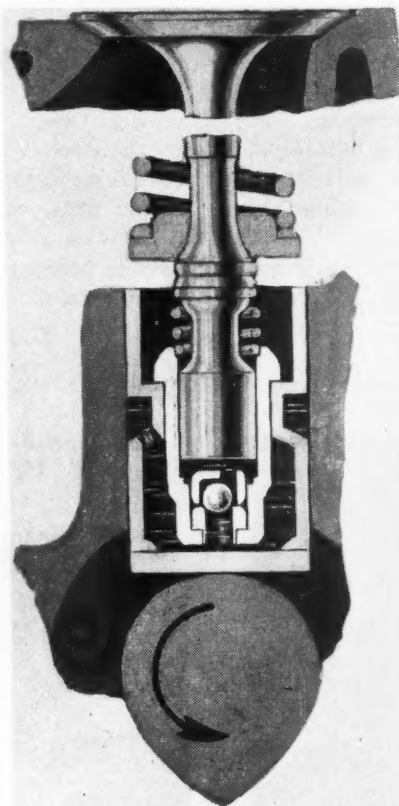
*I have a customer whose 1946 Chevrolet keeps fouling plugs, one plug about every two weeks. I have given this customer's car a valve job and have tried just about every make of 10 mm spark plug in the business, hot and cold, but to no avail. What's wrong with this car? Hank Migliora, Hank's Super Service, 1407 Erie Street, S.W., Massillon, Ohio.*

**I** HAVE heard of similar complaints but they were taken care of by installing hotter plugs. Also, adding an additional plug gasket has proven successful. If the above suggestions fail I would suggest removing the cylinder head and drilling the spark plug holes out in order to use 14 mm plugs. This last method has worked in every case.

### Lincoln is Sluggish And Burns Oil

*Please help me with a problem on a 1946 Lincoln. I have done the following to it: Installed bearing inserts, new rings, cam shaft inserts, new clutch assembly, valve lifters, spark plugs, oil filters, top oiler, rebuilt timer, carburetor, completely gone over body, chassis and wheels, flushed radiator, new hoses, rebuilt and cleaned heaters, new overdrive, and so forth. The car now has about 3500 miles on it*

*since the overhaul. It is slow on pick up and top speed is about 70 mph. It uses about 1 quart of oil in 75 to 125 miles. This engine will carbon up and knock about 800 to*



*1000 miles after carbon is cleaned. Kenneth Wyle, 3128 Henrietta Street, St. Louis 4, Missouri.*

**I** WOULD install valve packing on the intake valves as it is quite possible that the oil is being sucked up the intake stem, letting

it into the combustion chamber. Also check the valve timing as it may be off a tooth. Remove the pistons and examine the rings. Make sure the cylinder walls are not glazed and that the rings are seated properly. Remove the coil and condenser and have them checked on a reliable tester, as they may be breaking down at high speeds.

### Gas Gage Troubles on 1950 Studebaker Commander

*We have a problem with gas gages on the 1950 Studebaker Commanders. The dash unit on several cars does not register full when the tanks are known to be full. The hand goes up to 3/4 and maybe to 7/8 full but no more. If the unit is taken out of the dash and connected by jumper leads, it goes on up to the full mark and sometimes more. Replacing the unit with another new one does not improve the situation. We have tried as many as three new ones in the same car. We had a theory that the gages were binding in some way after installation, but if the unit is taken out and completely insulated with tape then replaced, the hand goes on past the full mark as far as it can go. It stays there even when the tank is empty. We have tried two or three new tank units but still there is no improvement. If you help us with the solution of this headache we will be very grateful to you. V. C.*



Williams, 1201 Delaware Dr., Port Arthur, Texas.

**I**T occurs to me that the trouble is most likely caused by the gage binding in the dash. When you insulated the gage, the insulation prevented the gage from making a good ground. Instead of using insulation use shim stock or run a separate wire from the gage to a good ground.

### Getting More Performance At Minimum Cost

I want to doctor up a 1938 Chevrolet to give it a little more top speed and better performance. The ring and pinion gear now used is 11-41. I want to consider the cost of doing the job. This car sets out in the winter weather and is used every day in going to and from work. The temperature is usually around 10° above 0, but spells of 0 to 10° are not unusual. I have in mind to plane about .040 in. to .045 in. off the head and install a dual intake manifold. Do you think for the extra cost it would pay to install aluminum pistons? I have been told of a high lift rocker arm being available for intake valves. With these alone they claim that better performance is obtained. If you were drilling a Chevrolet shaft for force feed lubrication, what size hole would you recommend? Would you use a heavier spring on check valve in the pump to increase the pressure? All information will be appreciated. Charles A. Schieszer, Schieszer Repair, 196 West Yerby, Marshall, Missouri.

**T**HERE are a number of things that can be done at very little expense. I would suggest planing the head the amount you specified, and while the head is off, clean and polish the intake ports both in the head and intake manifold. This is most important and will assure you of good gas and air distribution to the combustion chambers. Installing high lift rocker arms will help, but for best results a high speed cam is desirable. The ignition system should be gone over carefully and the coil and condenser capacity checked.

Better all around performance would be obtained by installing 38-9 ring gear and pinion. Installing aluminum pistons is a good idea and worth the added expense. Drilling the crankshaft is a major job and very expensive. In my opinion it is not worth the trouble. Rather than drilling the present shaft, I understand that a G.M.C. crankshaft can be adapted to this engine.

### Low Speed Miss on Mercury Is Baffling This Shop

I installed a 1950 Mercury crankshaft and piston in a 1948 Mercury. I used the same rods, pins, inserts, etc., but put in the new chrome rings and did a valve job. Our trouble is a miss or jerk at speeds from 8 to 14 mph. When starting out in low, going to second and then going to high it is most noticeable, but also does it when slowing down and then speeding up again in high gear. Two new sets of plugs were tried, spaced at .025, .030 and .040 in. A rebuilt distributor was installed, then a new one. We installed all new secondary cables, tried a rebuilt and a new carburetor. We reground the valves. We replaced all manifold and carburetor gaskets and installed dual exhausts. Then we tried it with all vacuum attachments off and the vacuum line plugged at the carburetor. We even tried double head gaskets. H. H. Kruse, Box 429, Port Orchard, Washington.

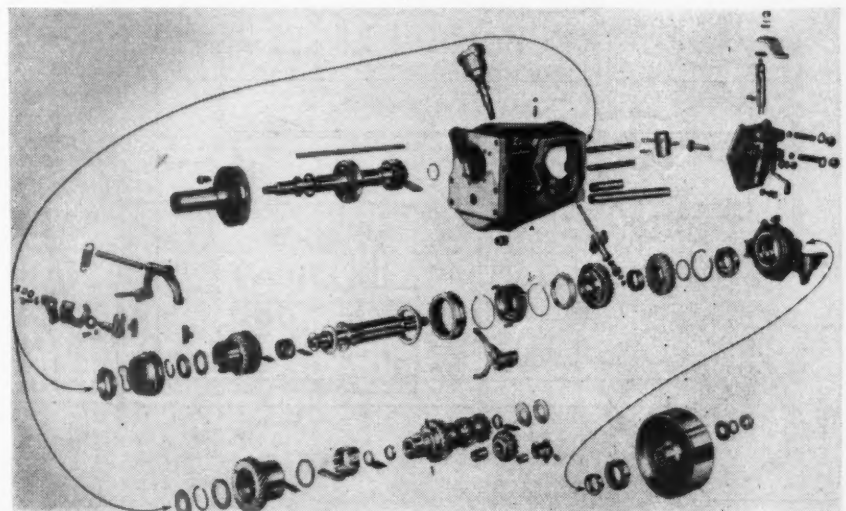
**I** AM inclined to believe this condition is caused by some unbalanced parts in the engine. Therefore, I would suggest running the engine at various speeds with the car standing still, noting whether the skip or vibration appears. It is possible that the clutch or fan blades may be unbalanced. Also check the manifold vacuum. It should read 17 to 21 in. If vacuum is low check for a crack in the manifold.

### Chrysler Has Noise in Clutch or Transmission

Can you help us with a 1941 Chrysler Six with fluid drive and Vacumatic transmission? When backing up or moving forward in low range, there is a noise by the clutch or transmission. It seems as though it had too much backlash. It is not noticeable while driving above eight miles per hour. We have installed new universal joints, a new clutch disc, a release bearing, checked the pressure plate adjustment and overhauled the transmission, but the noise still continues. We have checked this car with the driveshaft removed and by working the clutch the noise can be heard. We have also checked the flywheel for looseness. Vern Frieden, Frieden Motor Co., West Union, Iowa.

**S**INCE the noise exists when the propeller shaft is disconnected, I would suggest that you check the  
(Continued on page 56)

Exploded View of 1941 Chrysler Transmission



## Clearing House . . . . Continued from Page 55

following items very carefully. Examine the crankshaft for excessive end-play. This can best be done by prying the flywheel back and forth with a screwdriver. You mentioned that the transmission had been overhauled, but nothing was said as to what was replaced. This type of noise could come from excessive play in the countershaft gears or from worn synchronizers. Another point to check is the clearance between the floor pan and the transmission, as these sometimes rub each other, thus causing such a noise.

### Overdrive Changes to Install Mercury Engine in Lincoln

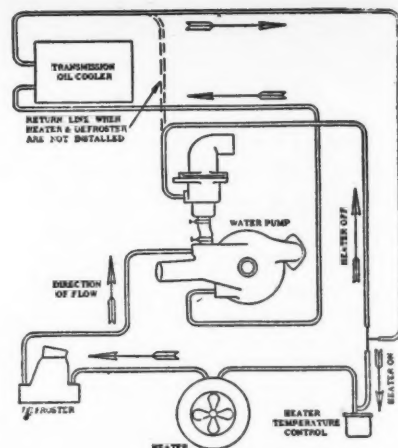
*I have to know what changes would be necessary in the wiring of a Lincoln Zephyr with Warner overdrive when changing to a Mercury motor, regarding the connection between the kick-down switch and solenoid in the Lincoln that are attached to the right and left bank condensers, whereas the Mercury has but the one condenser. May they both be attached at the same point to the one condenser of the Mercury? Also, what is the cause when the overdrive free-wheels in overdrive at all speeds? Change of worn*

*overdrive clutch unit makes no change. George Setter, G & S Motor Service, Oasis Garage, Saugus, California.*

**R**EGARDING your question as to what makes an overdrive free wheel at all speeds, it is probably caused by a defective governor or relay. When the car coasts down to speeds around 25 mph, the governor breaks the overdrive relay circuit and de-energizes the overdrive solenoid. This causes the overdrive to disengage and return to conventional gear ratio. No changes will be necessary on the overdrive wiring. When using the Mercury engine, attach both wires to the one condenser.

### Dynaflow-equipped Buick Runs Hot in Traffic

*One of our customers has a 1950 Dynaflow Buick on which the water temperature runs above normal on hot days when running in traffic. I was wondering if the Dynaflow had anything to do with it. Could you explain just how the Dynaflow transmission is cooled? I understand it is cooled from the water in the radiator. Frank's Auto Service, Germantown, Pa.*



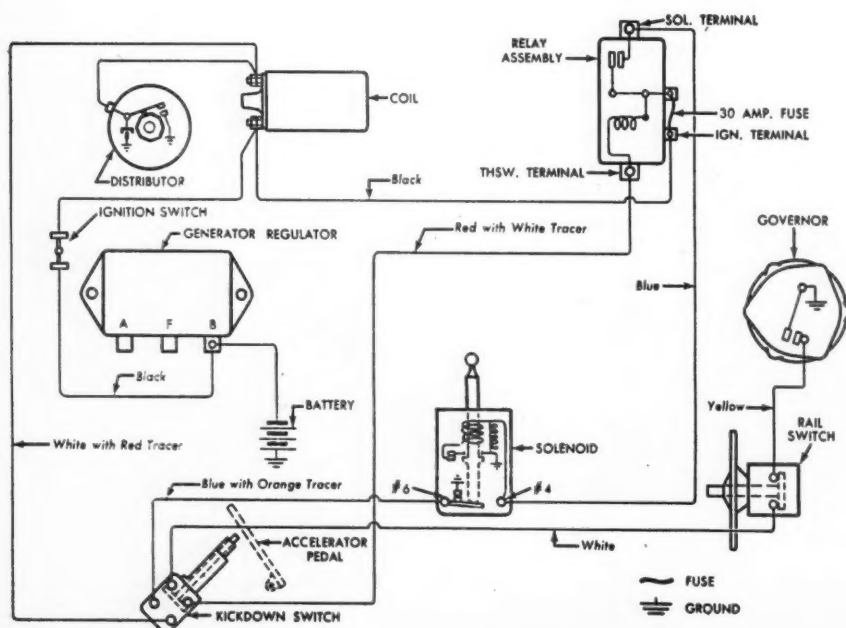
**I**T isn't unusual for these jobs to run a little warm, due to the heat transfer from the transmission to the radiator. A transmission oil cooler is used and is connected to the radiator. One line is attached to the water pump and the other to the thermostat.

### Starter Acts Sluggish On Chevrolet School Bus

*I am servicing a 1937 Chevrolet school bus with a 1941 high torque motor in it. The route is about 35 miles long and the starter turns the motor okay when he starts on the route, but will not turn it very fast when he has made the route. It has been about 2 years since the motor was overhauled. It burned out a rod last winter and I installed a new one then. I put in a new starter and a 51 plate 100 amp. hr. battery which didn't do any good. I can push or pull the bus and it starts. Corwin Garage, Miller, Missouri.*

**I** AM inclined to believe that the trouble still lies in the starter or cables. Therefore, I would suggest making a voltage drop test at all the connections. If drop is more than .1 volt, look for poor connections or faulty wires and cables. The starter draw may be tested by connecting a volt meter between the starter terminal and ground. With engine and battery at normal temperature, operate starter and observe the volt meter reading. The volt meter should read a steady 4.8 volts or more. If the meter fluctuates, it is an indication that the starter is dragging. If reading is less than 4.8 volts, a defective starter is indicated.

Wiring diagram of overdrive installed in Lincoln

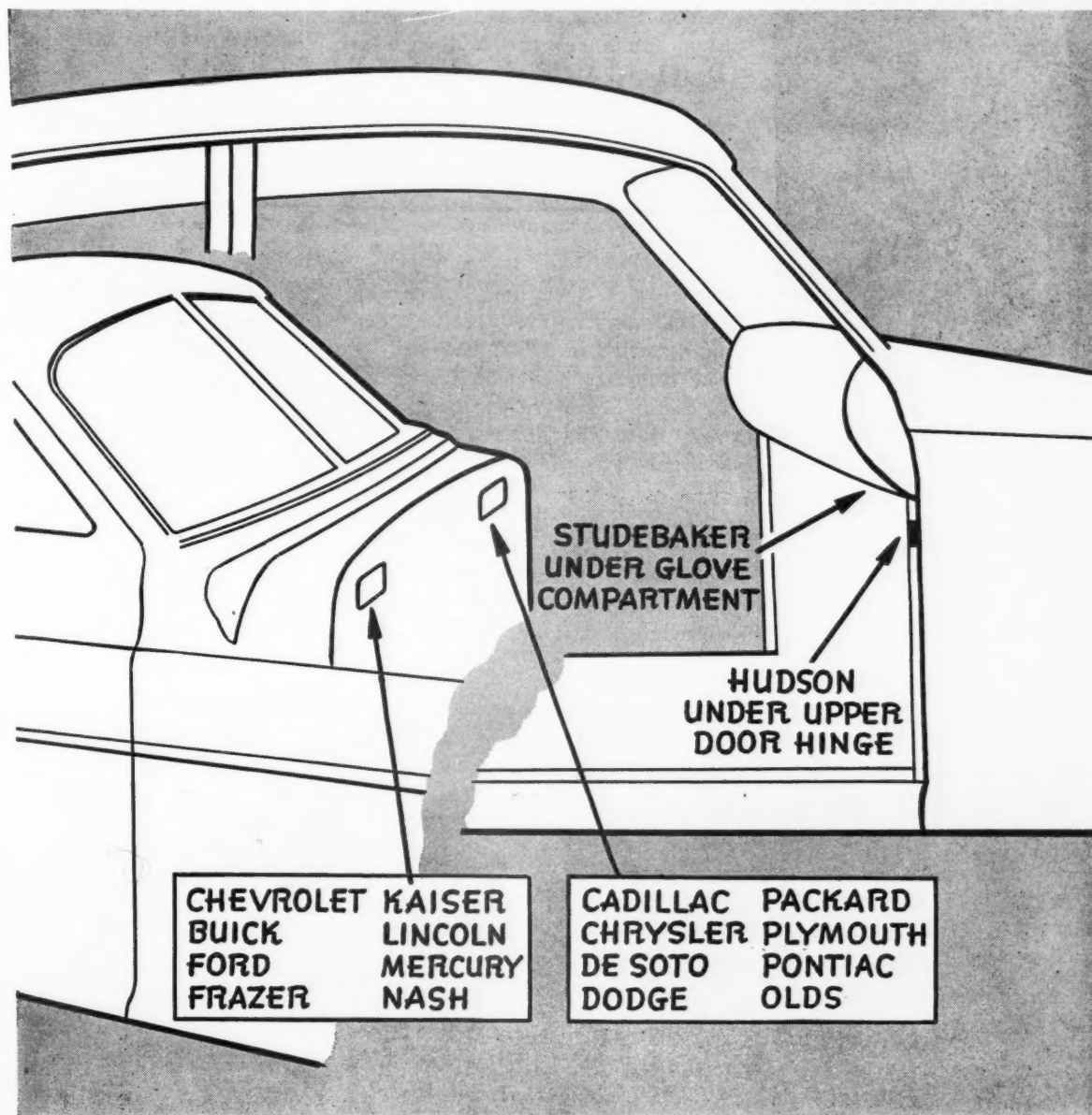


# PAINT NUMBER LOCATIONS

## On 1950 Cars

**W**HILE most cars have their paint code numbers on a plate on the firewall, Studebaker has a paper sticker under the glove compartment with the paint clearly indicated. Hudson's number is on a plate on the right front door post. All General Motors cars, Chrysler, DeSoto, Kaiser, Frazer and Nash have the paint number, identified as such, on a firewall-mounted plate. Dodge and Plymouth are coded on a small plate mounted on the firewall. The first group of digits before the hyphen indicates the paint. Ford's number, stamped on the fire-

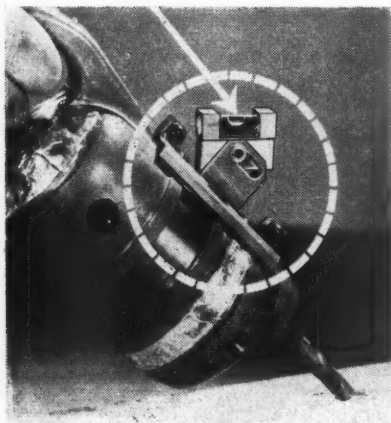
wall, consists of five units. First are two letters standing for the assembly plant; the second unit is a letter and two digits which indicate body style. The color code number, which follows, will run between 3 and 14. Next, the upholstery number, always runs between 40 and 43. The remainder of the letters and digits indicate the date of manufacture and the schedule number of the car. The paint code number on Lincoln and Mercury is indicated by the first two digits on the plate. Packard's code is shown by a single letter painted on the left side of the firewall.





# NEW Products

## SHOW WINDOW



### ◀ 385. Attachment

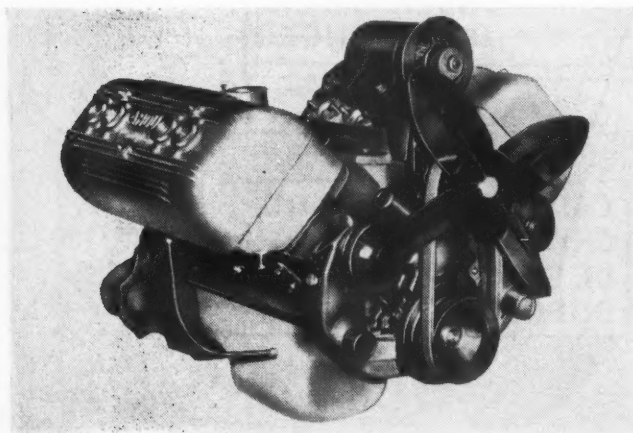
The Singer Kennedy Corporation announces the Midget Ken-Drill Level Attachment, for use on electric hand drills to enable the operator to drill absolutely

straight holes at any angle. The bubble-level unit can be set at any desired angle up to 90 degrees and then, as the user proceeds with the drilling, he merely keeps the bubble between the two guide lines.

### ▼ 386. Engine Conversion

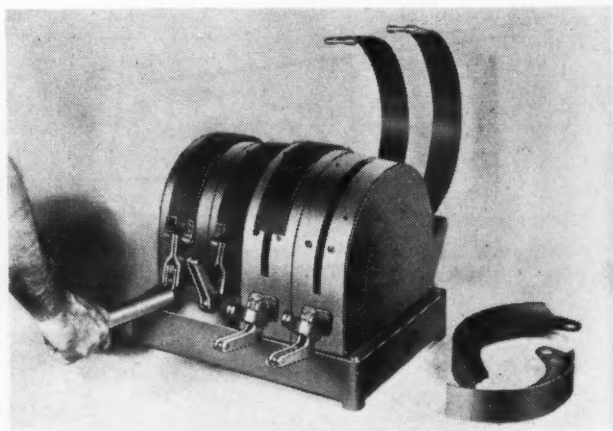
The Ardun Power Products Corporation announces production of the Ardun overhead valve conversion unit for installation on 100-

hp Ford V-8 engines. According to the manufacturer this unit can be installed in 6 to 8 hours. It is one complete unit which attaches to the 100-hp Ford engine to convert it to 160 hp, requires only ordinary gasoline to operate, and does not decrease engine life expectancy. The unit comprises a high efficiency cylinder head . . . hemispherical combustion chamber . . . and radically inclined overhead valves.



### ▼ 387. Bonding Unit

The Lapeer Mfg. Co. is marketing the Knu-bonder for bonding brake linings at the rate of 30 to 50 shoes per hour, four shoes at a time. In operation, brake shoes should be ground down to clean steel, then placed on the Knu-bonder. The lining is placed over the shoe and covered by a flexible band. Springs produce pressure of 75 to 100 psi. A heating element supplies 400 to 500 deg. F.



## For Further Information Use Postcard Facing Next Page

### ► 388. Magnetic Tools

The Owatonna Tool Company announces a new magnetic screw starter that fits all sizes of Phillips and Reed and Prince recessed head screws. The bit on each

starter is built of heat treated alloy steel and is permanently magnetized. Three lengths are available, 3 in., 6 in., and 9 in., for maneuverability in close quarters and accessibility from a distance.

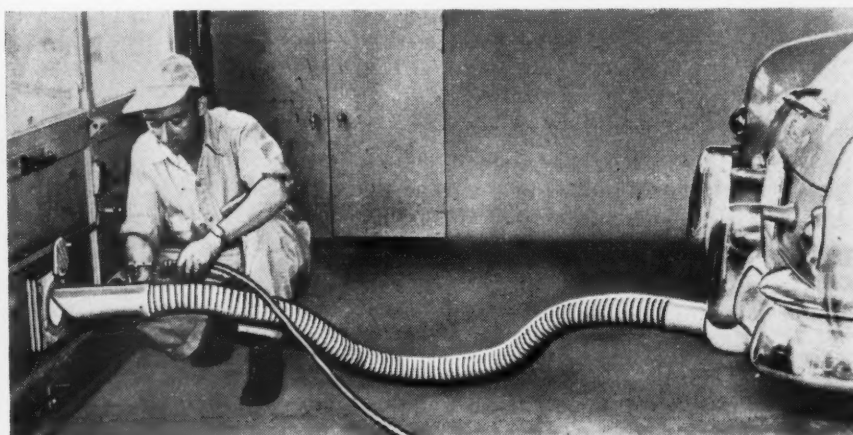
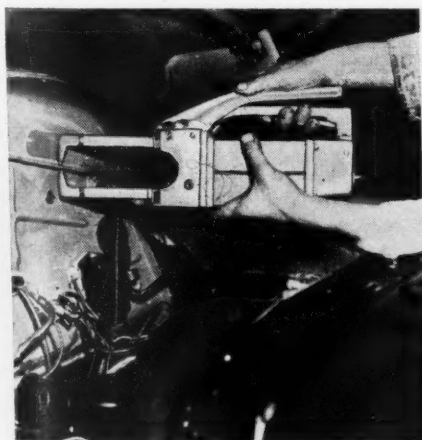
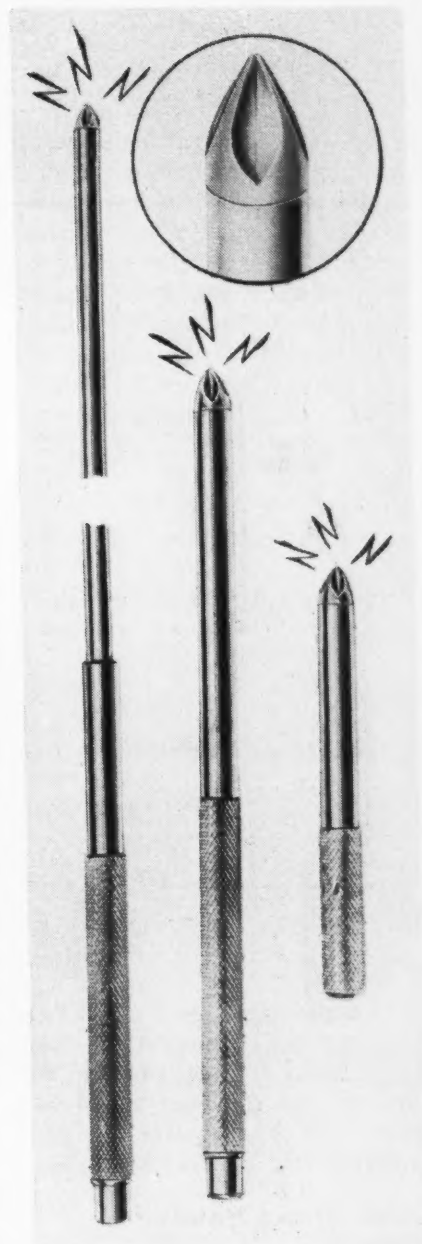
### ▼ 389. Portable Welder

Mid-States Welder Mfg. Co. is introducing a new portable spot welder known as the "Zip." Features of this welder are a fixed top tong and newly designed adjustable curved tips. It is claimed that perfect balance affords greater ease of handling and operation. The unit is completely portable, weighing 23 lb and welds mild steel, stainless, galvanized iron, terne plate and magnesium.

### ▼ 390. Exhaust System

The National System of Garage Ventilation, Inc., has developed a new type exhaust gas removal system for service stations with bay-type service areas. Called National Exhaust-Dor System, it takes smoke and fumes direct from the exhaust pipe to the out-of-doors without heat loss in the service bays. The system can be installed without any change or

*(Continued on page 60)*



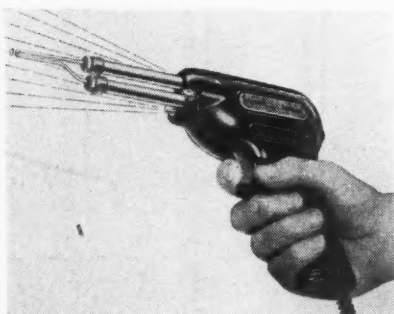
# New Products Show Window

Continued from Page 59

alteration of present facilities, according to the manufacturer. The equipment consists of a door plate, flexible hose, an adjustable adapter designed to permit the use of motor analyzers and a ventura action nozzle. The adjustable adapter is attached to the exhaust pipe and the nozzle placed through the door plate. The engine can then be operated.

## 391. Soldering Gun

The Weller Electric Corporation has announced a new light-duty soldering gun with dual spotlights to eliminate shadows, and over/



under terminals to brace the tip and improve visibility. This model is claimed to be smaller and lighter than the obsolete 135 watt guns, yet has greater soldering capacity.

## 392. Road Sander

Highway Safety Appliances, Inc., has developed the Skid-Master electric road sander for passenger cars. Installation of the Skid-Master is made in the trunk. The valves which control the unit open at the flip of a switch to discharge a safety grit, which enables the driver to stop and start quickly and to control skids under hazardous road conditions. This road sander is designed specifically for use with Skid-Master Safety Grit.

## 393. Turn Signals

Yankee Metal Products Corp. announce a conversion kit that will enable a car owner to turn

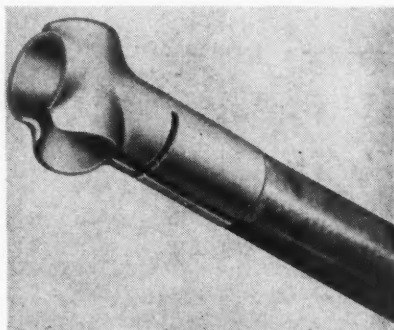
his front parking lights and rear tail lights into flashing turn signals without installing new lamps. The converted car has a fingertip control switch for flashing the turn signal lights on and off plus a pilot light that tells when they are operating. The kit includes everything needed for the conversion—a switch; flasher; sockets for parking light conversion and double filament bulbs; and necessary wire terminals, junction blocks, wire clips, asphaltum loom to protect exposed wire leads.

## 394. Valve Springs

The Manley Valve Corporation, makers of Manley Airchrome Valves, announces a line of valve springs covering popular car models from 1928 through 1949. Complete interchange data are available from the manufacturer. According to the firm, precision forming and rigid testing assures uniform high quality of the springs.

## 395. Plug Terminal

The Burndy Engineering Company has developed a universal-type ignition terminal for use on all makes of passenger cars, trucks, tractors and buses. Designated as the Hyspark, it is a one-piece terminal that has two outlets which are arranged so as to permit straight thrust or right angle thrust connection to the spark

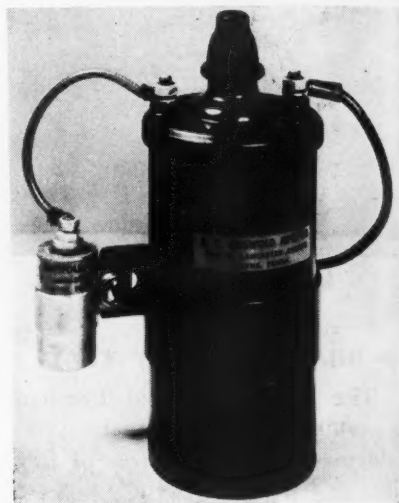


plugs. Using this new universal terminal, duplication of sets be-

cause of variety of terminal angle, has been eliminated, as the problem of stocking is simplified.

## 396. Ignition Coil

The F. T. Griswold Company is marketing the BXS coil, a high performance unit developed to



meet the requirements of instantaneous starting, minimum battery current consumption, and long service life. The design of the coil is said to increase the life of the distributor contact points. It is claimed to be particularly suitable for use on high compression engines turning at high speeds, and by using this coil, spark plugs and spark plug electrodes can be opened up to the widest gaps recommended by engine manufacturers, consequently smoothing the engine operation.

## 397. Bench Grinder

The Baldor Electric Company announces development of a new 6-in. bench grinder in 1/4 hp and 1/3 hp sizes. The grinder has extra wide clearance between the wheels and the motor frame which is said to permit the grinding of large and odd shaped pieces. Also, long pieces may be moved across the front of the motor frame because it is smaller in diameter than the grinding wheel. Additional features include capacitor start, capacitor run motor, ball bearings which never require lubrication, and tool rests which may be tilted for angle grinding.







## HERE'S HOW TO GET

# Free Information

Here is a recap of the New Products described in this issue, along with their code numbers.

On each of the three postage-paid postcards below you can request further data on four items described in this New Products section. Fill out one of the quarter sections completely for each item in which you are interested.

- 385. Attachment
- 386. Engine Conversion
- 387. Bonding Unit
- 388. Magnetic Tools
- 389. Portable Welder
- 390. Exhaust System
- 391. Soldering Gun
- 392. Road Sander
- 393. Turn Signals
- 394. Valve Springs
- 395. Plug Terminal
- 396. Ignition Coil
- 397. Bench Grinder
- 398. Sealer Book
- 399. Window Lift Kit
- 400. Tappet Tool
- 401. Chain Booklet
- 402. Sales Book
- 403. Anti Freeze
- 404. Tire Changer
- 405. Door Aligner
- 406. Cable Adjuster
- 407. Business Records
- 408. Wheel Signs
- 409. Car Washer

USE THESE POSTCARDS

<p style="text-align: right;">10/50</p> <p>Name ..... <input type="checkbox"/></p> <p>Title ..... <input type="checkbox"/></p> <p>Company ..... <input type="checkbox"/></p> <p>Co. Address ..... <input type="checkbox"/></p> <p>..... <input type="checkbox"/></p> <p>Chilton's MOTOR AGE, Phila. 39</p> <p style="font-size: small;">Write in the number of the product about which you want more information</p>	<p style="text-align: right;">10/50</p> <p>Name ..... <input type="checkbox"/></p> <p>Title ..... <input type="checkbox"/></p> <p>Company ..... <input type="checkbox"/></p> <p>Co. Address ..... <input type="checkbox"/></p> <p>..... <input type="checkbox"/></p> <p>Chilton's MOTOR AGE, Phila. 39</p> <p style="font-size: small;">Write in the number of the product about which you want more information</p>
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# New Products Show Window

Continued from Page 60

## 398. Sealer Book

The Minnesota Mining and Manufacturing Company announces an illustrated manual on the use of adhesives and sealers in autobody refinish shops. The 16-page manual gives application methods and technical data on ten "3M" adhesives, sealers and coatings.

## 399. Window Lift Kit

The Weatherhead Company announces a new automatic window lift hose make-up kit. The kit offers a comprehensive assortment of connections necessary to make lines, plus a generous supply of original equipment hose. This merchandiser is a self-contained

disposable counter package which offers six different type connections to take care of all window lift, folding top and similar hydraulic hose requirements.

## 400. Tappet Tool

Herbrand Tools has announced the No. T-100 tappet adjuster, specially designed for adjusting tappets on cars with overhead valves. Using this tool, the motor may be kept running during the adjustment. A spring loaded blade moves up and down inside the handle. The hand that is holding the handle is kept steady because of the spring action. A broad notched tip keeps the blade from slipping out of the adjusting screw.

## 401. Chain Booklet

Campbell Chain Company has announced to the automotive trade the availability of a new booklet on tire chains entitled "There Is No Substitute For Chains." The booklet presents sales arguments for use by dealers in selling tire chains. It contains a chart showing the stopping distances necessary when driving without chains on ice and snow, and points out the reasons why tire chains are necessary for safe winter driving.

## 402. Sales Book

Wheel Weights, Inc., manufacturers of L & H wheel balance weights is issuing the first issue of a new sales promotion piece, designed to help sell wheel balancing to the consumer. Called "The Balanced Wheel," Volume 1, Number 1 features the results of an opinion survey of service establishments equipped to do wheel balancing. The article tells what percentage of wheel balancing jobs are asked for by the customer and what percentage must be sold by the operator. Also included is a table showing the eight most opportune times to sell wheel balancing. A third article ties in these suggestions with a wall chart, which shows and tells where and how wheel balancing reduces tire and front end wear up to 50%.

(Continued on page 110)

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# Chilton's MOTOR AGE

## Flat Rate and Service Manual

### Service Suggestions

The information presented here has been compiled from the Factory Service Bulletins, as an additional service of Chilton's Motor Age Flat Rate and Service Manual Department.

Selected by William H. Lutton,  
Assistant Editor  
Chilton Motor Age Flat Rate and  
Service Manual

#### Drilling Out By-Pass

##### Eliminates Overheating

Some servicemen have reported difficulties with overheating problems on Cadillacs during car warm-up or whenever the thermostat is closed for any length of time.

Test for this condition by starting and warming up the engine or by driving the car under normal conditions. While the engine is warming up, notice the temperature gauge readings on the instrument panel. If the indicator moves from normal to hot and back to normal again within two minutes, this is indication of insufficient circulation of the water through the block while the thermostat is closed. Make a more positive test by removing the thermostat. Then follow the same procedure as outlined above. If the indicator does not move past normal, as it did with the thermostat installed, then the cause is insufficient water pump by-pass hole area.

After this condition was investigated at the factory, it was decided that the water pump by-pass hole should be drilled out to  $\frac{3}{8}$  in. to improve the circulation of the water through the block while the thermostat is closed. Servicemen

are advised to do the same whenever this condition is encountered. Drill out the by-pass hole to  $\frac{3}{8}$  in.

On engine units after 9L43260, 8L662 and 2L936, this condition has been taken care of and is being performed in production.

#### Acceleration Without

##### Hesitation on Studebaker

Two improvements have been made in the accelerating pump construction on the 14A, 15A and 16A Commanders, to prevent any hesitation or back-firing while accelerating.

Beginning with Eng. No. H-335157, a solid type pump piston

(Part No. 527126) was used in production. Recently a change was made and now releases a new pump piston spring (Part No. 527016) and an additional conical spring also (Part No. 527017), which is to be installed below the piston to eliminate any lost motion in the linkage.

If you encounter the above mentioned condition in any engine prior to Eng. No. H-335157, just order the Kit (Part No. 527127), which includes the solid type piston and both upper and lower springs. On any engine between Eng. No. H-335157 and H-370001, only spring (Part No. 527016 and Part No. 527017) will be required to effect this change.

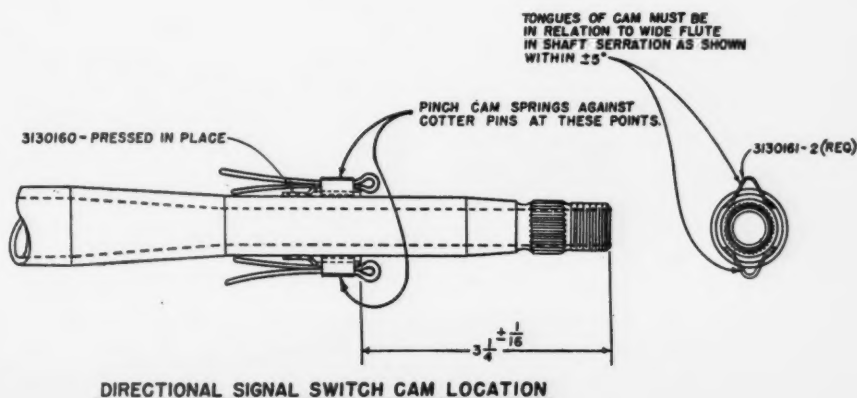
#### Nash Directional

##### Signal Switch Cam

Analysis of directional signal switch failures has revealed that the switches are frequently damaged through improper use. Damage may be caused by the operation of the switch when the release

cam is in line with the rollers on the release lever, or holding the switch in the "on" position while the cam is rotating.

Therefore, effective at car serials K-374603 and R-573004, a new directional signal switch cam housing and springs have entered production.



# Shop Kinks



**\$25**

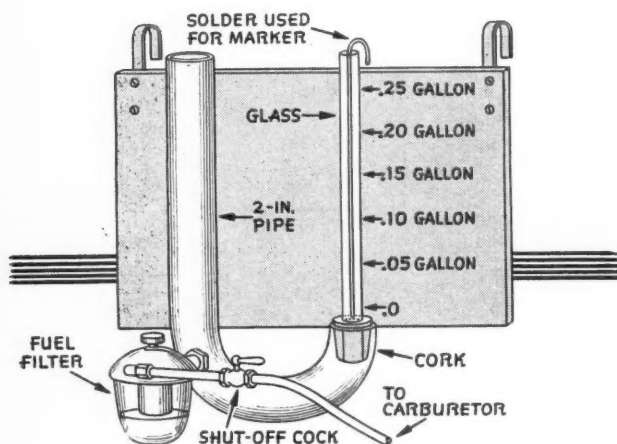
**FOR THE BEST KINK  
PUBLISHED  
EACH MONTH**

**\$5**

**FOR ALL KINKS  
PUBLISHED  
EACH MONTH**

If you've come upon an original idea for making a job easier, a special tool, short cut on a job or any trick of value to other readers, write it down and, if necessary, make a rough sketch. Just make it clear. Send it to Motor Age. If we can use your Kink it may bring five, possibly 25 dollars.

## Best Kink of the Month



### Gas Mileage Tester

A gas mileage tester can be made easily with a galvanized pipe, a cork, a glass tube, and a strip of solder as a marker. It can be used on the road or dynamometer at any speed. The solder strip is marked as shown and placed in the glass tube. The gas mileage can then be computed by dividing the number of miles traveled by the amount of gas used. *A. L. Ghatti, Ghatti Carburetor & Electric Service, 4 Waverly Street, Framingham, Massachusetts.*

### Cork Tips on Curb Alarms Prevent Injury to Mechanics

When lubricating cars on a hoist with "curb alarms" attached to the fenders, the lube man might be seriously injured or blinded by running into one of the protruding alarms. We now put large corks on the ends, or a cloth attached to the alarm is snapped up under the fenders. The cloth or cork is a safety

precaution and also a reminder to remove before the car is called for. *John B. Margison, Brooklyn Super Service, 30th & Beech Streets, San Diego, California.*

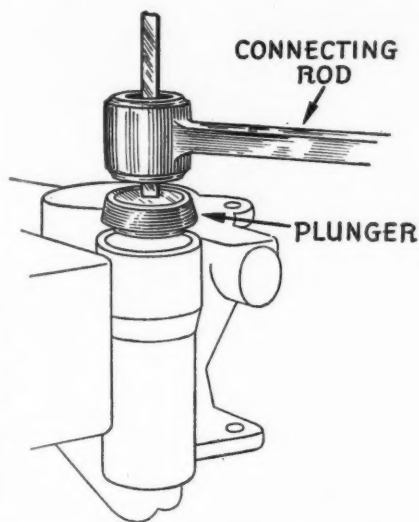
### Heat Indicator Removed Through Freeze Plug Hole

I have an idea that is a money saver as well as a time saver. On Chrysler built cars when taking off

the cylinder head, the end of the heat indicator that screws in the head is usually stuck tight. By pulling on the tube to get it out usually breaks it. I save time by knocking out the freeze plug directly over the stuck element. Then by using a screwdriver I can push the element out easily and safely. *Richard Batla, Miles Motor Company, 120 Porter Street, Taylor, Texas.*

## Installing a Chevrolet Acceleration Pump Plunger

When the leather doesn't want to enter the barrel on a Chevrolet carburetor, try this. Take a V-8



connecting rod, pull the plunger up through the bushing end of the rod. Set the bushing end of the rod over the plunger barrel and the plunger will slide easily into the barrel, and keep the leather straight. *Jernigan Motor Company, Manchester, Tennessee.*

## Hand Gun Helps to Drain Oil From Filter

When changing oil filter cartridges I use a hand type oil gun to draw the old oil from the filter after the cartridge is removed. This is much faster than removing the small drain plug at the bottom of the filter. *Woodrow J. Cunningham, 457 West Arrow St., Marshall, Missouri.*

## Vice-Grip Pliers Clamp Heater Hoses for Removal

An easy way of removing auto heaters without draining the car is done with the use of vice grip pliers. You can do this simply by clamping the pliers between the engine and the heater, then remove the heater without draining the car. *Ondras Brothers, 1101 Central Avenue, Gary, Indiana.*

## Copper Tubing Used to Speed Wiring Through Grommet

When installing units that require wires to pass through the

rubber grommets in the fire wall, I have found that I can save several minutes on each wiring job by doing the following:

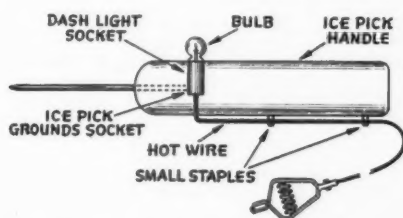
Insert a short length of 1/2 in. or 5/16 in. tubing through the grommet, pass the wires through the tubing, remove the tubing, then make your connections. Not only does this save minutes on each job, but also does away with much aggravation and skinned knuckles. *Edward Kramer, John Van Benschoten, Inc., 165 Smith Street, Poughkeepsie, New York.*

## Ring Compressor for Small Engine Repairs

When working on a small engine, if a special ring compressor is not available, use a wide hose clamp of the worm drive type. It will cover up all rings and the various sizes on the market will handle the different bores. *Carl A. Stomber, Norm's Garage, Freeport, Ill.*

## Ice Pick Makes Good Electric Circuit Tester

Here is a tester I made from an old ice pick. It is very useful in



testing hot wires. You can make one in no time at all and use very little material. *Emmitt Thompson, Wallace Motor Company, 801 W. Inner Street, Salisbury, North Carolina.*

## Cement on Shaft Prevents Sun Visor's Falling Down

A remedy for a faulty sun visor that continues to fall down is to slide the visor off the shaft and apply a thin coating of 3M weather-stripping cement to the shaft. Slide the visor back in place and when the cement is dry the visor will stay up in place. This works when bending the shaft and other remedies have failed. *V. R. Richmond, Rt. 2, Box 92, Van Buren, Arkansas.*

## How to Remove Truck Full Floating Rear Axles

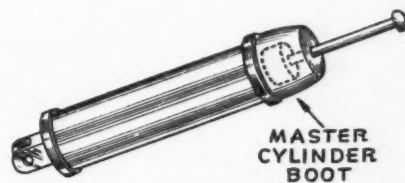
Here is an easy way to remove full floating axles on trucks. Place a brass drift about 1 in. in diameter and 8 or 10 in. long on the end of the axle, as if you were going to drive the axle into the wheel. Then strike with a medium size hammer 3 or 4 times and the axle will bounce right out. This system is harmless to the gasket surface and faster than pullers. *Fred W. Hines, R.F.D. No. 1, Box 22, Fairfield, California.*

## Rubber Hose in Spark Plug Wrench Protects Porcelains

When using a spark plug wrench for replacing or removing spark plugs, unless the wrench is held perfectly straight, the porcelain is often broken or cracked when pressure is put on the handle. To eliminate this a piece of rubber hose slipped into the socket will act as a guide and cushion and prevent any chances of breakage. *Marion L. Rhodes, Knightstown, Indiana.*

## Rubber Boot Seals Hydraulic Window Cylinders

We are having a lot of trouble with the hydraulic cylinders on the windows of late model cars. Most of this is caused by rain getting down to the piston rod of the cylinder. A quick and sure seal for this is to take a Chevrolet master cylinder boot, slip it over the rod, and spread it over the end of the cylinder when installing a new cylinder. There is a ridge on the end of the cylinder just perfect for holding the boot in place. A little powdered graphite on the shaft will aid in operating. The boot is slightly



hard to get in place on the cylinder but this only makes it fit tighter. *A. W. Lummis, Lummis Garage, 166 Madeira Avenue, Coral Gables, Florida.*



# Current Engine and Tune-up Specifications

MAKE AND MODEL		ENGINE					TUNE-UP DATA										STEERING													
		Wheelbase (in.)	No. of Cylinders, Bore and Stroke	Taxable Hp.	Piston Displacement (Cu. In.)	Maximum Brake Hp. at Specified R.P.M. (with Bare Engine)	Compression Ratio	Spark Plug and Type	No. and Width Compression	No. and Width Oil	Inlet	Exhaust	Seat Angle	Valves		Ignition			Caster (Deg.)	Camber (Deg.)	Toe-In (in.)	King Pin Inclination (Deg.)								
													Operating Tappet Clearance	Timing Marks or After TC	Timing	Breaker Point Gap	Cam Angle (Deg.)	Spark Plug Gap	Spark Occurs	Timing Marks	Timing	Rods Removed From Refill (Qts.)	Cooling System Capacity (Qts.)							
Buick Special 40	8-3 1/2 x 3 1/2	121 1/2	30.6	248.1	115-3600	6.6	AC-48	2-3/8	2-3/8	45	45	.372	.015H	.015H	13BT	None	.015	.015	.025	4BT	Fly	A 5 1/2	13	13	1 1/2 to 1 1/2	1 1/2 to 1 1/2	1 1/2 to 1 1/2	4 1/4	4 1/4	4 1/4
Buick Super 50	8-3 1/2 x 3 1/2	121 1/2	32.5	263.3	124-3600	6.9	AC-48	2-3/8	2-3/8	45	45	.372	.015H	.015H	13BT	None	.015	.015	.025	4BT	Fly	A 5 1/2	13	13	1 1/2 to 1 1/2	1 1/2 to 1 1/2	1 1/2 to 1 1/2	4 1/4	4 1/4	4 1/4
Buick Roadmaster 70	8-3 1/2 x 3 1/2	126 3/4	37.8	320.2	152-3600	7.2	AC-48	2-3/8	2-3/8	45	45	.372	.015H	.015H	14BT	None	.015	.015	.025	6BT	Fly	A 7	17 1/2	17 1/2	1 1/2 to 1 1/2	1 1/2 to 1 1/2	1 1/2 to 1 1/2	5 5/8	5 5/8	5 5/8
Cadillac 61, 62, 65	8-3 1/2 x 3 1/2	146 1/2	46.5	331.0	160-3500	7.5	AC-46-5	2-1 1/4	2-1 1/4	44	44	.343	.015H	.015H	24BT	None	.015	.015	.035	5BT	VD	A 5	18	18	1 1/2 to 1 1/2	1 1/2 to 1 1/2	1 1/2 to 1 1/2	5 5/8	5 5/8	5 5/8
Cadillac 61, 62, 65	8-3 1/2 x 3 1/2	146 1/2	46.5	331.0	160-3500	7.5	AC-46-5	2-1 1/4	2-1 1/4	44	44	.343	.015H	.015H	24BT	None	.015	.015	.035	5BT	VD	A 5	18	18	1 1/2 to 1 1/2	1 1/2 to 1 1/2	1 1/2 to 1 1/2	5 5/8	5 5/8	5 5/8
Chevrolet Six, HJ-HK	6-3 1/2 x 3 1/2	115	29.4	216.5	92-3400	6.6	AC-46-5	2-1 1/4	2-1 1/4	30	30	.341	.006H	.013H	18T	Fly	.021	.021	.035	5BT	Fly	A 5	15	15	1 1/2 to 1 1/2	1 1/2 to 1 1/2	1 1/2 to 1 1/2	4=30°	4=30°	4=30°
Chevrolet 2100	6-3 1/2 x 3 1/2	115	30.4	235.5	105-3600	6.7	AC-46-5	2-1 1/4	2-1 1/4	30	30	.341	.006H	.013H	18T	Fly	.021	.021	.035	5BT	Fly	A 5	15	15	1 1/2 to 1 1/2	1 1/2 to 1 1/2	1 1/2 to 1 1/2	4=30°	4=30°	4=30°
Chrysler Six, C-48	6-3 1/2 x 3 1/2	125 1/2	28.3	250.6	116-3600	7.0	AL-AR-5	2-3/8	2-3/8	45	45	.341	.008H	.010H	12BT	VD	.020	.020	.035	TC	VD	A 5	17	17	1 1/2 to 1 1/2	1 1/2 to 1 1/2	1 1/2 to 1 1/2	4 1/2 to 6	4 1/2 to 6	4 1/2 to 6
Chrysler Eight, C-48	6-3 1/2 x 3 1/2	131 1/2	33.8	323.5	135-3200	7.2	AL-AR-5	2-3/8	2-3/8	45	45	.341	.008H	.010H	12BT	VD	.020	.020	.035	TC	VD	A 6	21	21	1 1/2 to 1 1/2	1 1/2 to 1 1/2	1 1/2 to 1 1/2	4 1/2 to 6	4 1/2 to 6	4 1/2 to 6
Chrysler Eight, C-50	6-3 1/2 x 3 1/2	145 1/2	33.8	323.5	135-3200	7.2	AL-AR-5	2-3/8	2-3/8	45	45	.341	.008H	.010H	12BT	VD	.020	.020	.035	TC	VD	A 6	21	21	1 1/2 to 1 1/2	1 1/2 to 1 1/2	1 1/2 to 1 1/2	4 1/2 to 6	4 1/2 to 6	4 1/2 to 6
Crosley Four, CD-49	4-2 1/2 x 2 1/2	100	10.0	44.0	26.5-5400*	7.8	AL-AN7E	2-1 1/2	2-1 1/2	45	45	.313	.004C	.006C	5BT	None	.020	.020	.040	8BT	Fly	B 2	4	7 1/2	1 1/2 to 1 1/2	1 1/2 to 1 1/2	1 1/2 to 1 1/2	8 1/2	8 1/2	8 1/2
De Soto Six, S-14	6-3 1/2 x 3 1/2	125 1/2	28.3	236.6	112-3600	7.0	AL-AR-5	2-3/8	2-3/8	45	45	.341	.008H	.010H	12BT	VD	.019	.019	.035	TC	VD	A 5	17	17	1 1/2 to 1 1/2	1 1/2 to 1 1/2	1 1/2 to 1 1/2	4 1/2 to 6	4 1/2 to 6	4 1/2 to 6
Dodge Six, D-33, D-34	6-3 1/2 x 3 1/2	125 1/2	25.3	230.2	103-3600	7.0	AL-AR-5	2-3/8	2-3/8	45	45	.340	.008H	.010H	8BT	VD	.020	.020	.035	TC	VD	A 5	15	15	1 1/2 to 1 1/2	1 1/2 to 1 1/2	1 1/2 to 1 1/2	4 1/2 to 6	4 1/2 to 6	4 1/2 to 6
Ford Six, OHA	6-3 1/2 x 3 1/2	114	26.1	225.9	95-3300	6.8	CH-H10	2-093	2-093	45	45	.341	.010C	.014C	11BT	CP	.025	.025	.030	TC	VD	A 4	17 3/4	17 3/4	1 1/2 to 1 1/2	1 1/2 to 1 1/2	1 1/2 to 1 1/2	5 1/2	5 1/2	5 1/2
Ford Eight, OBA	6-3 1/2 x 3 1/2	114	32.5	239.4	100-3600	6.8	CH-H10	2-093	2-093	45	45	.341	.010C	.014C	11BT	CP	.025	.025	.030	TC	VD	A 4	22	22	1 1/2 to 1 1/2	1 1/2 to 1 1/2	1 1/2 to 1 1/2	5 1/2	5 1/2	5 1/2
Ford Six, 515, 516	6-3 1/2 x 3 1/2	123 1/2	26.3	226.2	115-3650	7.3	AL-A5G	2-093	2-093	45	45	.341	.014C	.014C	10BT	VD	.020	.020	.032	4BT	VD	A 5	13 1/2	13 1/2	1 1/2 to 1 1/2	1 1/2 to 1 1/2	1 1/2 to 1 1/2	4 1/2 to 5 1/2	4 1/2 to 5 1/2	4 1/2 to 5 1/2
Hudson 500	6-3 1/2 x 3 1/2	118 1/2	30.4	232.0	112-4000	6.7	CH-J7	2-078	2-078	45	45	.341	.008H	.010H	7 1/2 BT	Fly	.020	.020	.032	TC	Fly	A 7	18 1/2	18 1/2	1 1/2 to 1 1/2	1 1/2 to 1 1/2	1 1/2 to 1 1/2	3 3/8	3 3/8	3 3/8
Hudson Six, 501-502	6-3 1/2 x 3 1/2	123 1/2	30.4	232.0	112-4000	6.7	CH-H8	2-078	2-078	45	45	.341	.008H	.010H	7 1/2 BT	Fly	.020	.020	.032	TC	Fly	A 7	18 1/2	18 1/2	1 1/2 to 1 1/2	1 1/2 to 1 1/2	1 1/2 to 1 1/2	3 3/8	3 3/8	3 3/8
Hudson Eight, 503-504	6-3 1/2 x 3 1/2	123 1/2	29.8	254.0	128-4200	6.7	CH-H8	2-093	2-093	45	45	.341	.008H	.010H	10 1/2 BT	Fly	.017	.017	.038	TC	Fly	A 7	18	18	1 1/2 to 1 1/2	1 1/2 to 1 1/2	1 1/2 to 1 1/2	3 3/8	3 3/8	3 3/8
Kaiser Six, 511, 512	6-3 1/2 x 3 1/2	118 1/2	26.3	226.2	115-3650	7.3	AL-A5	2-093	2-093	45	45	.341	.014C	.014C	10BT	VD	.020	.020	.032	4BT	VD	A 5	13 1/2	13 1/2	1 1/2 to 1 1/2	1 1/2 to 1 1/2	1 1/2 to 1 1/2	4 1/2 to 5 1/2	4 1/2 to 5 1/2	4 1/2 to 5 1/2
Lincoln OEL-OEH	8-3 1/2 x 4 1/2	118	39.2	336.7	152-3600	7.0	CH-H10	2-093	2-093	45	45	.341	.011C	.015C	8BT	CP	.015	.015	.025	4BT	VD	A 6	34 1/2	34 1/2	1 1/2 to 1 1/2	1 1/2 to 1 1/2	1 1/2 to 1 1/2	5	5	5
Mercury OCM	8-3 1/2 x 4 1/2	118	32.5	255.4	110-3600	6.8	CH-H10	2-093	2-093	45	45	.341	.011C	.015C	8BT	CP	.015	.015	.025	4BT	VD	A 5	22 1/2	22 1/2	1 1/2 to 1 1/2	1 1/2 to 1 1/2	1 1/2 to 1 1/2	5	5	5
Nash Rambler 5110	6-3 1/2 x 3 1/2	100	23.4	172.6	82-3800	7.3	AL-A5	2-093	2-093	45	45	.341	.015H	.015H	8BT	None	.021	.021	.030	TC	VD	A 5	12	12	1 1/2 to 1 1/2	1 1/2 to 1 1/2	1 1/2 to 1 1/2	8	8	8
Nash Statesman 5140	6-3 1/2 x 3 1/2	112	23.4	184.0	85-3800	7.0	AL-A5	2-093	2-093	45	45	.341	.015H	.015H	8BT	None	.020	.020	.030	TC	VD	A 5	12	12	1 1/2 to 1 1/2	1 1/2 to 1 1/2	1 1/2 to 1 1/2	8 1/2	8 1/2	8 1/2
Nash Amb. 5160	6-3 1/2 x 3 1/2	121	27.3	234.8	115-3400	7.3	AL-A5	2-093	2-093	45	45	.372	.015H	.015H	8 1/2 BT	None	.020	.020	.030	TC	VD	A 5	16	16	1 1/2 to 1 1/2	1 1/2 to 1 1/2	1 1/2 to 1 1/2	8 1/2	8 1/2	8 1/2
Oldsmobile 76	6-3 1/2 x 3 1/2	119 1/2	29.9	257.1	105-3400	6.5	AC-45	2-3/8	2-3/8	30	30	.342	.008H	.011H	4BT	None	.021	.021	.040	TC	Fly	A 5	18 1/2	18 1/2	1 1/2 to 1 1/2	1 1/2 to 1 1/2	1 1/2 to 1 1/2	4 29/47"	4 29/47"	4 29/47"
Oldsmobile 88	6-3 1/2 x 3 1/2	126 1/2	30.5	303.7	135-3600	7.2	AC-45	2-3/8	2-3/8	45	45	.342	.008H	.011H	4BT	None	.021	.021	.040	TC	Fly	A 5	21 1/2	21 1/2	1 1/2 to 1 1/2	1 1/2 to 1 1/2	1 1/2 to 1 1/2	4 29/47"	4 29/47"	4 29/47"
Oldsmobile 98	6-3 1/2 x 3 1/2	135	45.0	303.7	135-3600	7.2	AC-45	2-3/8	2-3/8	45	45	.342	.008H	.011H	4BT	None	.021	.021	.040	TC	Fly	A 5	21 1/2	21 1/2	1 1/2 to 1 1/2	1 1/2 to 1 1/2	1 1/2 to 1 1/2	4 29/47"	4 29/47"	4 29/47"
Packard 200-2401	8-3 1/2 x 4 1/2	122	39.2	288.0	135-3600	7.0	(k)	2-093	2-093	45	45	.341	.007H	.010H	15BT	None	.015	.015	.028	6BT	None	A 7	20	20	1 1/2 to 1 1/2	1 1/2 to 1 1/2	1 1/2 to 1 1/2	5 50"	5 50"	5 50"
Packard 300-2402	8-3 1/2 x 4 1/2	127	39.2	327.0	150-3600	7.0	(k)	2-093	2-093	45	45	.341	.007H	.010H	15BT	None	.015	.015	.028	6BT	None	A 7	20	20	1 1/2 to 1 1/2	1 1/2 to 1 1/2	1 1/2 to 1 1/2	5 50"	5 50"	5 50"
Packard 400-2406	8-3 1/2 x 4 1/2	127	39.2	327.0	155-3600	7.3	(k)	2-093	2-093	45	45	.341	.007H	.010H	15BT	None	.015	.015	.028	6BT	None	A 7	20	20	1 1/2 to 1 1/2	1 1/2 to 1 1/2	1 1/2 to 1 1/2	5 50"	5 50"	5 50"
Plymouth Six, P19, P20	6-3 1/2 x 3 1/2	120	25.3	217.8	97-3600	7.0	AL-AR-5	2-3/8	2-3/8	45	45	.340	.008H	.010H	12BT	VD	.020	.020	.035	TC	VD	A 5	15	15	1 1/2 to 1 1/2	1 1/2 to 1 1/2	1 1/2 to 1 1/2	4 1/2 to 6	4 1/2 to 6	4 1/2 to 6
Pontiac Six, 25	6-3 1/2 x 3 1/2	120	30.4	239.2	90-3400	6.5	AC-45	2-3/8	2-3/8	30	30	.312	.012H	.012H	8BT	CC	.022	.022	.025	6BT	VD	A 5	18 1/2	18 1/2	1 1/2 to 1 1/2	1 1/2 to 1 1/2	1 1/2 to 1 1/2	5 1/2	5 1/2	5 1/2
Pontiac Eight, 27	6-3 1/2 x 3 1/2	120	36.4	286.2	108-3600	6.5	AC-45	2-3/8	2-3/8	30	30	.312	.012H	.012H	8BT	CC	.016	.016	.025	6BT	VD	A 5	20	20	1 1/2 to 1 1/2	1 1/2 to 1 1/2	1 1/2 to 1 1/2	5 1/2	5 1/2	5 1/2
Studebaker Six, 9G	6-3 1/2 x 3 1/2	113	21.6	169.6	85-4000	7.0	CH-J7	2-3/8	2-3/8	45	45	.312	.016C	.016C	15BT	VD	.020	.020	.025	2BT	VD	A 5	10	10	1 1/2 to 1 1/2	1 1/2 to 1 1/2	1 1/2 to 1 1/2	5 1/2	5 1/2	5 1/2
Studebaker Six, 17A	6-3 1/2 x 3 1/2	113	26.3	245.6	102-3200	7.0	CH-J7	2-3/8	2-3/8	45	45	.312	.016C	.016C	15BT	VD	.022	.022	.025	2BT	VD	A 5	13 1/2	13 1/2	1 1/2 to 1 1/2	1 1/2 to 1 1/2	1 1/2 to 1 1/2	5 1/2	5 1/2	5 1/2
Willis 4-63	4-3 1/2 x 4 1/2	104	15.6	134.2	63-4000	6.5	AL-AN7	2-3/8	2-3/8	45	45	.373	.016	.016	9BT	Fly	.022	.022	.030	5BT	Fly	A 4	11	11	1 1/2 to 1 1/2	1 1/2 to 1 1/2	1 1/2 to 1 1/2	5 1/2	5 1/2	5 1/2
Willis 663	6-3 1/2 x 3 1/2	104	21.6	148.5	72-4000	6.4	AL-AN7	2-3/8	2-3/8	45	45	.340	.016	.016	9BT	VD	.020	.020	.030	5BT	VD	A 4	11	11	1 1/2 to 1 1/2	1 1/2 to 1 1/2	1 1/2 to 1 1/2	5	5	5

ABBREVIATIONS

With Standard Accessories

At 1 1/2 Miles Per Hour

At 1 1/2 Miles Per Hour

At 1 1/2 Miles Per Hour

At 1 1/2 Miles Per Hour

At 1 1/2 Miles Per Hour

\*—With Standard Accessories  
 —Plus or Minus 1/2°  
 —At 1/2° Camber  
 —Depression in Camshaft Gear  
 —Do not recommend using a dwell meter for checking point opening

†—Used with Powerglide transmission at extra cost.  
 (a)—Model 61—122; 62—126; 60—130 in.  
 (b)—121 in. for OEL model; 125 in. for Cosmopolitan model.  
 (c)—Upper Ring 1/2 in., Lower Ring 1/2 in.

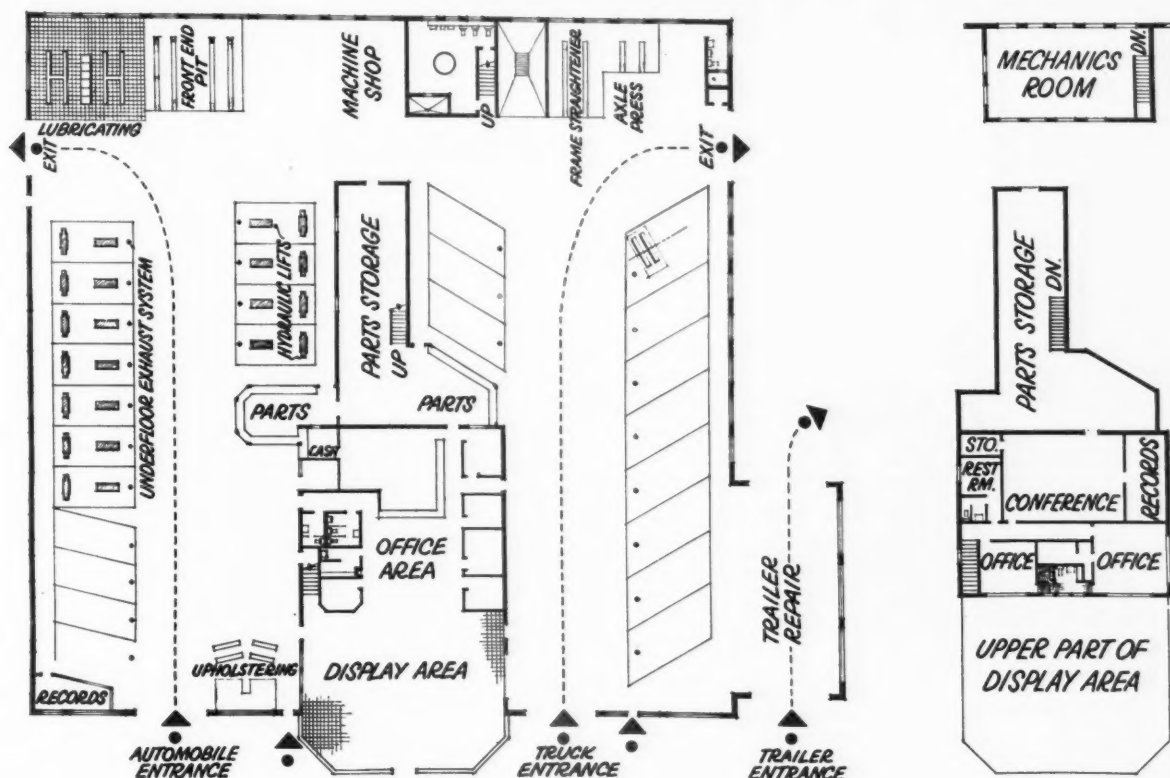
(d)—Top ring .093; bottom ring .123.  
 (e)—At 1000 Rpm.  
 (f)—Top Ring 1/2; Middle Ring 1/2  
 (g)—Auto-Lite A-5; A-4/5; Champion J-8.  
 (h)—Upper Ring 1/2; Lower Ring 1/2  
 (i)—D33=115; D34=120 1/2

(j)—P18=111 1/2; P20=118 1/2  
 (k)—20 and 124  
 (l)—Left side 1/2° to 1/2° higher than right.  
 A—Rods removed from above  
 AA—Automatic Adjustment  
 AC—AC Spark Plug Div.

DH—Distributor Housing  
 Fly—Flywheel  
 HA—Hydraulic Automatic Adjustment  
 TC—Top Center  
 TG—Timing Gears  
 VD—Vibration Damper

# FLOOR PLANS

FOR BETTER SERVICE



## Oklahoma Dealer Provides Equal Space for Cars and Trucks

THE service departments of the new building of the Denison Motor Co., Oklahoma City, Okla., Dodge-Plymouth dealer, form a horseshoe around a center cluster which includes the show-room, offices and parts department. Cars and trucks are serviced separately and have separate entrances to facilitate traffic flow and to allow more efficient handling of customers. A special set-back tractor-trailer entrance enables complete

The new building of the Denison Motor Co., Oklahoma City, Okla. Notice that the design of the structure offers good accessibility as well as an attractive appearance.

units to be cleared off the street, repaired without uncoupling, and driven out through an opposite door.

All departments have been strategically located for efficient operation in the Denison building. The plant covers 40,000 square feet, and features all the latest equipment including a dynamometer, twin post lifts and an underfloor exhaust system.

An adjoining building houses the paint and body shop. Used car and truck lots, wholesale parts building, warehouse and parking areas complete the organization, except for the conference room, rest rooms and mechanics room which are located on the second floor. Additional storage space and offices are also on the second floor.

Denison Motor Co. is claimed to be one of the largest dealers in the Southwest.



# New Car Registrations by Makes by States\*

STATE AND MONTH	Buick	Cadillac	Chevrolet	Chrysler	Crosley	De Soto	Dodge	Ford	Frazier	Hudson	Kaiser	Lincoln	Mercury	Nash	Oldsmobile	Packard	Plymouth	Pontiac	Studebaker	Willys	All Others	Total
Alabama..... July	734	75	1855	181	11	139	435	1526	8	144	114	52	430	177	363	54	694	567	257	73	5	7,894
..... 7 Mos.	3887	417	12109	610	55	429	1526	10817	85	657	301	295	3017	1144	2167	357	2745	2740	2182	268	16	45,824
Arizona..... July	323	34	549	75	10	35	160	444	7	95	52	14	108	88	138	18	212	120	147	22	3	2,652
..... 7 Mos.	1576	207	3868	293	16	157	470	2759	21	477	118	52	654	397	835	164	828	866	1057	98	29	14,932
Arkansas..... July	279	40	874	76	10	70	242	790	6	46	71	10	150	115	138	27	418	217	133	42		3,754
..... 7 Mos.	2059	251	6215	366	53	340	1165	5914	135	420	399	120	1218	729	1217	269	2075	1804	1157	307	21	26,234
California..... July	2846	724	8002	1456	16	1050	1959	5658	73	1071	549	197	1817	1485	1855	338	3472	2225	2272	180	174	37,422
..... 7 Mos.	23359	4257	60428	5217	220	4013	7494	47599	411	7559	1617	1699	14641	9068	16312	2852	13386	18700	17729	912	1495	259,068
Colorado..... July	521	61	1096	202	14	139	444	860	11	279	73	55	328	252	258	76	560	367	166	36	2	5,800
..... 7 Mos.	3206	421	6754	763	84	455	1442	6068	71	1724	226	259	1919	1741	1887	442	2138	2277	1412	217	7	33,513
Connecticut..... July	734	188	1708	322	21	218	576	1076	22	229	178	47	475	301	516	144	836	572	356	128	103	8,748
..... 7 Mos.	4441	968	10595	1079	71	696	1971	7799	129	1113	466	287	2611	1524	3210	848	3071	3696	2409	430	289	47,906
Delaware..... July	121	32	291	32		31	117	244	1	24	43	12	74	32	92	17	137	129	78	10	4	1,521
..... 7 Mos.	813	159	2266	120	9	108	364	1835	25	158	133	51	496	137	717	118	504	936	726	51	18	9,804
Dist. of Col. July	172	44	478	84	1	53	162	357	1	68	19	20	97	92	181	44	377	189	70	3	10	2,482
..... 7 Mos.	1376	333	4026	392	5	212	690	3223	17	467	54	146	1050	431	1340	276	1345	1458	637	44	103	17,627
Florida..... July	999	167	2269	399	111	239	622	1785	16	268	153	112	651	381	568	155	1242	715	351	185	176	11,764
..... 7 Mos.	5613	1125	13857	1347	393	714	2556	12504	89	1522	336	656	4977	1839	3544	854	3944	4446	2923	758	483	64,770
Georgia..... July	1122	133	2580	225	6	184	578	1894	8	170	142	66	528	183	563	82	952	609	353	53	20	10,431
..... 7 Mos.	6521	840	17110	1015	58	712	2765	14847	123	1202	498	545	4650	1206	3793	639	4353	5111	2890	376	106	69,380
Idaho..... July	228	33	631	83	1	37	128	435	6	95	31	24	130	150	157	23	240	191	198	39	7	2,881
..... 7 Mos.	1421	176	3253	266	3	198	444	2471	36	473	118	91	701	657	877	180	839	984	1058	170	54	14,510
Illinois..... July	2548	619	5638	940	25	618	1873	5660	113	1195	821	155	1526	1032	1907	450	3902	2009	1289	119	15	32,552
..... 7 Mos.	19533	3294	46328	3851	136	2925	7710	38852	812	8611	2527	1221	11505	7969	13693	3267	14157	15133	10353	722	97	212,768
Indiana..... July	1058	179	3267	443	19	365	758	2312	40	447	399	62	534	692	788	188	1520	809	1091	120	10	15,171
..... 7 Mos.	7419	1083	21147	1635	95	1268	3075	17443	327	2780	1289	443	3666	4116	5274	1270	5586	6448	8513	543	41	93,462
Iowa..... July	916	193	2846	425	5	286	942	2319	43	325	433	62	625	537	718	132	1497	825	368	42	2	13,541
..... 7 Mos.	5543	757	17660	1473	5	996	3231	16153	267	1608	1243	319	3864	2625	4086	758	5151	4977	2902	208	15	73,870
Kansas..... July	595	89	1941	239	8	151	536	1521	28	168	173	28	396	316	343	95	839	547	300	33	1	8,347
..... 7 Mos.	3856	463	11375	797	11	608	1769	10156	180	1260	552	250	2589	1823	2496	700	2988	3518	2088	135	7	47,572
Kentucky..... July	605	97	1990	242	5	159	435	1598	19	141	148	20	267	284	442	66	920	504	333	93	2	8,370
..... 7 Mos.	3527	398	12027	810	32	524	1663	9973	100	881	413	137	1432	1329	2632	501	3062	3053	2169	364	11	45,018
Louisiana..... July	788	121	2151	254	21	218	525	1710	18	166	218	37	422	195	408	75	775	620	392	75	8	9,197
..... 7 Mos.	4043	589	11308	685	91	586	1709	11138	110	749	521	204	2640	926	2489	434	2768	3237	3122	289	34	47,672
Maine..... July	198	44	509	97	8	66	173	400	7	87	58	21	114	102	181	26	282	187	119	39	7	2,725
..... 7 Mos.	1391	261	4229	390	35	291	812	3125	89	545	339	96	874	555	1069	217	1406	1517	884	190	42	18,367
Maryland..... July	608	110	1858	274	8	207	548	1385	11	235	136	65	490	245	445	122	955	532	334	61	21	8,649
..... 7 Mos.	3889	556	13350	1008	36	731	1982	10406	97	1202	465	332	3297	1446	3009	800	3603	3554	2342	208	80	52,393
Massachusetts..... July	1754	403	3975	825	40	693	1507	3439	49	758	448	115	1121	821	1662	293	2512	1624	1040	215	108	23,402
..... 7 Mos.	8027	1529	19876	2132	145	1736	4137	16655	198	2700	1013	537	4768	3592	7478	1132	6901	7654	5549	677	362	95,768
Michigan..... July	3377	776	10467	1123	13	968	2712	8303	98	1433	1256	285	1851	1228	2469	272	4455	3286	1104	203	29	45,708
..... 7 Mos.	20399	4020	56921	3789	107	3155	7822	54665	716	6035	3032	1318	12504	5561	14165	1833	14355	19023	7594	590	94	237,558
Minnesota..... July	1352	186	3136	490	7	329	998	2654	91	490	587	71	672	560	873	287	1584	966	668	70	17	16,018
..... 7 Mos.	7554	837	19599	1808	30	1280	3337	17367	495	2837	1841	357	3972	3429	4886	1519	5873	6022	5013	230	110	88,391
Mississippi..... July	522	65	1181	144	7	89	256	990	7	48	88	31	252	126	198	44	584	343	168	32	4	5,179
..... 7 Mos.	2910	330	7487	468	35	323	957	6885	42	321	218	142	1408	607	1344	212	2056	2000	1382	149	10	29,336
Missouri..... July	1065	171	3750	375	10	299	761	3196	47	176	179	79	849	643	751	185	1633	978	563	71	6	15,837
..... 7 Mos.	6323	946	22138	11315	48	1106	2654	16163	166	1281	614	405	4768	3237	4350	931	5487	5337	3357	373	29	83,078
Montana..... July	499	74	1516	122	2	78	233	1010	17	204	69	38	279	156	398	60	351	362	334	28	4	5,884
..... 7 Mos.	1432	223	4424	342	8	242	668	3325	43	677	151	111	864	521	1166	214	1273	1101	1128	143	15	18,071
Nebraska..... July	519	86	1528	280	2	112	388	1125	12	109	120	50	276	184	370	92	691	513	245	29	3	6,734
..... 7 Mos.	3420	446	9176	906	13	450	1464	8469	75	630	319	213	1975	895	2005	442	2615	2948	1756	120	10	38,347
Nevada..... July	69	27	215	48	1	25	40	114		20	6	16	45	34	31	16	82	34	38	11		877
..... 7 Mos.	366	126	1058	124	2	74	108	604		132	12	59	257	146	227	96	261	215	296	54	1	4,218
New Hampshire..... July	126	20	378	45	3	38	119	303	8	78	38	13	91	87	106	21	137	136	105	41	14	1,965
..... 7 Mos.	865	127	2581	240	14	143	509	2104	38	349	165	67	488	462	642	158	732	931	496	136	48	11,255
New Jersey..... July	1698	358	3690	697	17	513	1427	2601	51	583	403	131	1180	553	1218	297	1926	1536	890	223	99	20,691
..... 7 Mos.	10279	1845	23349	2563	94	1682	4790	18322	306	3364	1030	750	7699	3405	7678	2005	7081	9838	5816	935	474	113,305
New Mexico..... July	279	33	539	71	5	36	114	371	7	63	28	18	161	84	117	22	229	179	148	23	6	2,533
..... 7 Mos.	1474	134	2800	246	48	131	415	2306	31	321	97	87	1002	352	615	167	768	853	927	139	30	12,943
New York..... July	4672	1220	9367	1822	50	1873	4157	6691	210	1665	1143	308	2373	1862	3654	679	5530	3729	1808	528	638	53,577
..... 7 Mos.	29069	6208	62168	1122	406	6160	15137	47956	1051	8646	4084	1813	16084	9987	23626	5188	20929	25656	13660	2573	2106	309,559
North Carolina..... July	997	126	2357	210	21	224	689	2012	33	163												



**This month brings  
America's automobile dealers  
the well-deserved honor of  
special recognition**



*Sound automobile dealerships  
contribute notably to our American way of life*

*Studebaker joins with the  
rest of the nation in saluting all the upstanding men  
who are making the business of selling  
and servicing automobiles so outstanding*

**STUDEBAKER**

PIONEER AND PACESETTER IN MOTORING PROGRESS

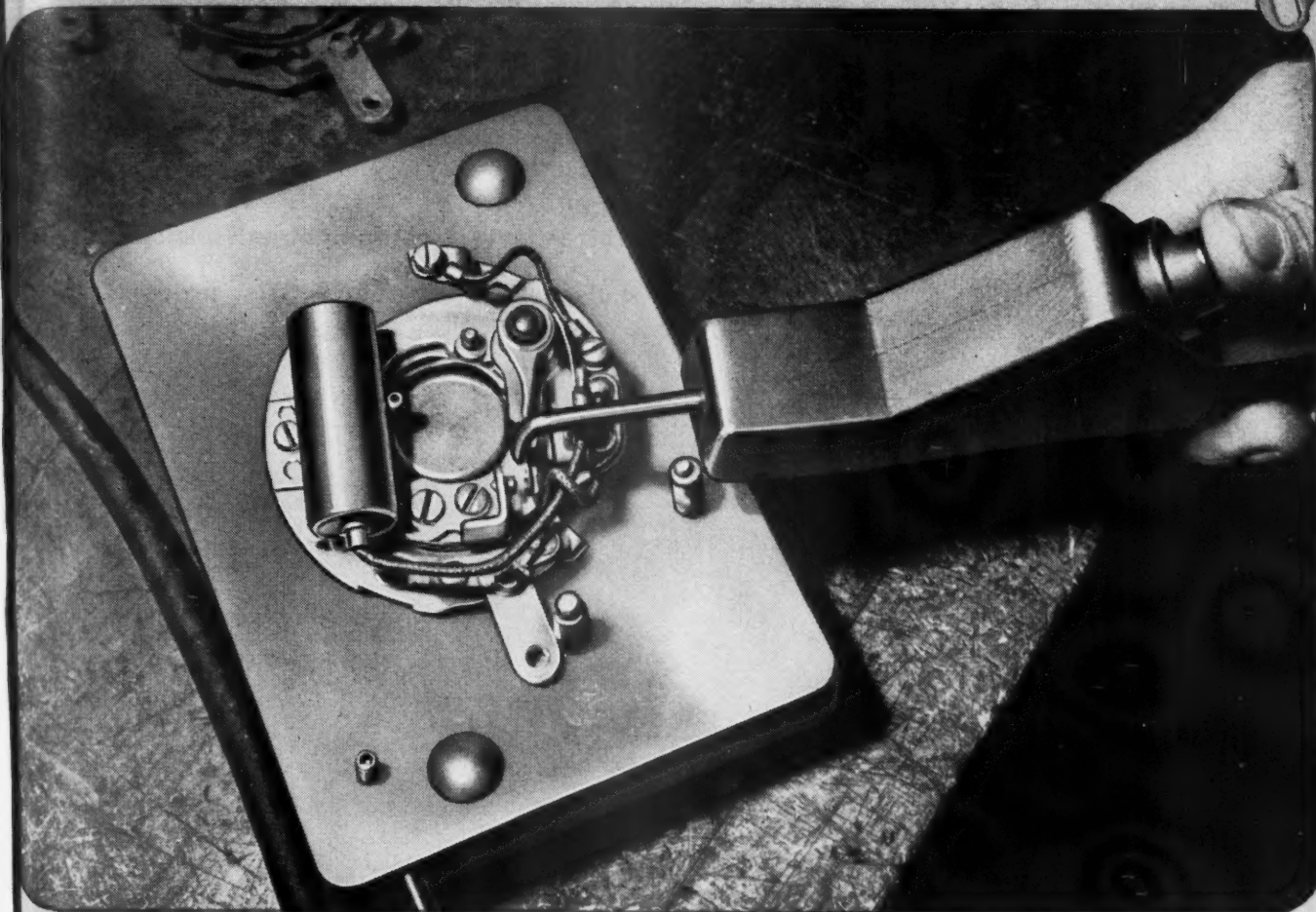
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# Tested Quality

## HELPS YOU

### DELIVER AMERICA'S FINEST IGNITION SERVICE



ORIGINAL

# AUTO-LITE

## SERVICE PARTS

Operator is making high voltage check on breaker plate insulation and condenser to insure freedom from shorts and grounds.

You have a major investment in your established reputation and your regular customers. The simple truth is you cannot protect this investment with workmanship alone, no matter how expert . . . unless it is backed up by parts of

unfailing quality. Proof of the dependability Auto-Lite Original Factory Parts afford expert service men is proved by this fact: more than half of America's car makers specify Auto-Lite. For information, write to

THE ELECTRIC AUTO-LITE CO. • Parts & Service Division • Toledo 1, Ohio  
Canadian inquiries should be addressed to Sarnia, Ontario



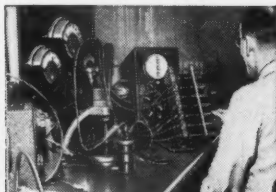
## Auto-Lite Ignition Engineering Assures Dependability



**MATERIAL TESTS . . .** all parts must measure up to determined standards before being released to production.



**ENGINEERED SPECIFICATIONS . . .** scientifically developed for every part. Nothing left to chance. High quality assures dependability.



**CONTINUING IMPROVEMENTS . . .** by the foremost engineers working in one of America's great engineering laboratories.



**APPROVAL OF LEADING CAR, TRUCK, AND TRACTOR MAKERS . . .** as original equipment, after most searching tests by engineers.

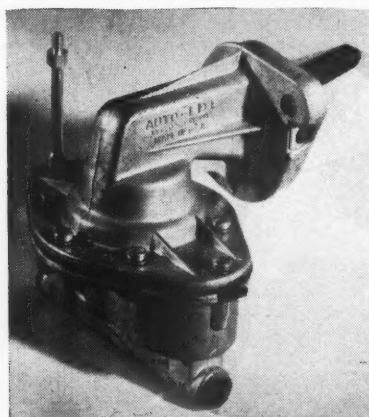


**FINISHED PRODUCTS TESTS . . .** every component and assembly passes repeated tests, checked constantly with laboratory research.

*Money cannot buy better Automotive Electrical Equipment*



# Overhauling the Auto-Lite Mechanical Fuel Pump



This unit is factory equipment and available as a replacement part for Chrysler products

Courtesy of the Electric Auto-Lite Co.



1. Upper Left. The Auto-Lite FA-4001 mechanical fuel pump.

2. Left. A cross sectional view of the pump.

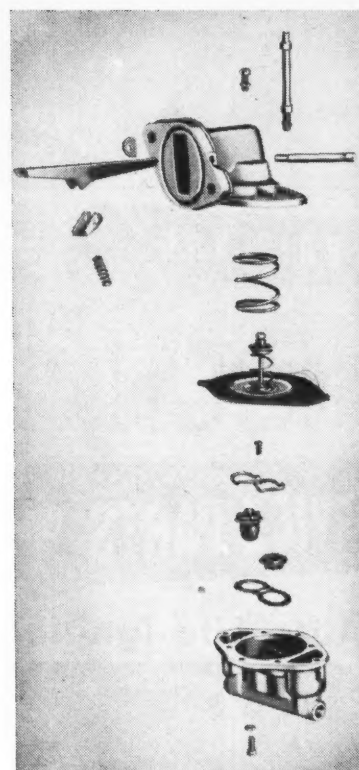
3. Below. An exploded view of the Auto-Lite mechanical fuel pump.

**T**HE Auto-Lite mechanical fuel pump, model FA-4001, is original equipment on the 1949 and 1950 Dodge passenger cars, models D29, D30, D33 and D34. It is also used for replacement on all Chrysler products except Chrysler Eight from 1946 to 1950. This pump has simplified construction, fewer parts and a multiple diaphragm, all of which are said to contribute to increased reliability. The combination of larger valves and air-domes increases the fuel and vapor handling capacity, Auto-Lite states. All internal parts are plated to prevent corrosion.

To disassemble the pump, remove the head shield stud and screws which hold the lever housing to the valve housing. This separates the pump into two subassemblies, the lever housing and the valve housing assembly, shown in Fig. 2. Each of these subassemblies should be disassembled, cleaned and inspected according to the following instructions.

**Lever Housing.** To remove the diaphragm assembly, drive the pivot pin through the washer with a center punch. Remove the washer and tap the pin back to its original position. Remove the burrs from the pin and drive it out with the

(Continued on page 103)



**Reconditioning  
used cars?**

**Doing intermittent  
body repair work?**

**Here are**

# 2 New Tools

**Just right for your needs!**

**Cut your costs! Save your time!**



**New**  
**VAN DORN**  
**7" JUNIOR**  
**SANDER**  
**\$53.00**

Specifically designed for intermittent sanding, grinding, rubbing, cleaning. Universal motor in line with spindle, "right angle" handles give perfect operating control, better balance, greater compactness that make this Sander ideal for touch-up jobs and working in close quarters. Weighs only 8 lbs. Switch and bearings sealed against dirt. Spindle locking pin speeds up changing attachments. Choice of three other Van Dorn Sander models for heavier duty (7" and 9" disc diam., from \$73.00).

**New**  
**VAN DORN**  
**7" JUNIOR**  
**POLISHER**  
**\$56.00**

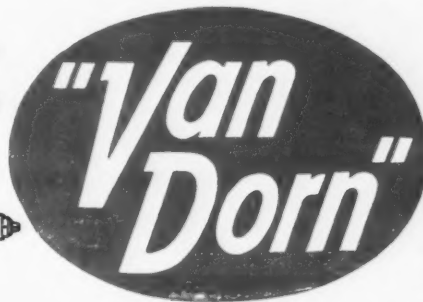
Perfect tool for intermittent polishing, waxing, rubbing. Same design features as 7" Junior Sander for easy handling. Same quality construction that includes heat-treated gears, grease-sealed ball bearings throughout for long life, smooth running. Van Dorn Polisher line also includes *exclusive* Automatic 7" model (\$90.00) with pump, reservoir and thumb-operated plunger which feeds polish to the work automatically; 7" Standard model (\$75.00) for continuous work without automatic feature.

**IF YOU ARE RECONDITIONING USED CARS**, these two speedy, new tools will help you *spruce them up* for more customer-appeal, better prices, beat competition! Ask your nearby Van Dorn Distributor for free demonstrations. Write for detailed catalog of over 100 other profit-making Electric Tools to: **THE VAN DORN ELECTRIC TOOL CO., 727 Joppa Road, Towson 4, Md.**

**For Power  
Specify**



**ELECTRIC DRILLS**



**Div. of Black & Decker  
Mfg. Co.**

**Portable  
Electric  
TOOLS**



**BENCH GRINDERS**

## Personals . . . . .

**Harold L. Danziger** has been named to the new post of Sales Manager of National Accounts, Whiz Automotive Division of the R. M. Hollingshead Corp., Camden, N. J.

**D. W. Johnston** has been appointed Vice President in charge of sales of Autocraft Manufacturing Corporation.

**Karl A. Panitz** has assumed new duties as Chief Engineer of National Motor Bearing Company, Inc.

**George S. Lamson**, Manager of the Automotive Replacement Division of the Thermoid Company, was elected Vice President of the company at a meeting of the Board of Directors.



George S. Lamson

**W. G. MacMann** has been appointed Field Sales Manager of the Automotive Division of Tinch Products Company. MacMann will be responsible for the appointment of representatives and warehouses as well as the direction of the company's new merchandising program.

**C. Eustace Dwyer**, Vice President of The Autocar Sales and Service Company, died August 10th at his home in S. Orange, N. J.

**Erwin Rausch** has been elected Vice President in charge of manufacturing of General Automotive Specialty Company Inc. Mr. Rausch has been with the company for three years as Chief Engineer.


**Col. J. G. Vincent** will retire as Executive Vice President of Packard Motor Car Company. Ap-




LeRoy Spencer

pointed to fulfill his position is LeRoy Spencer, West Coast executive.


**Lloyd B. Poole** has been named General Sales Manager of the Vokar Corporation.



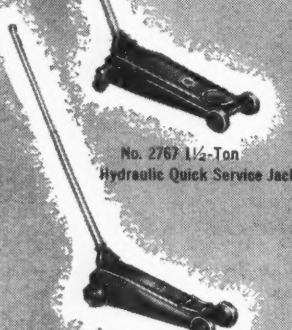
**...TO SPEED UP YOUR SERVICE WORK  
...TO HELP YOU TURN OUT BETTER JOBS**



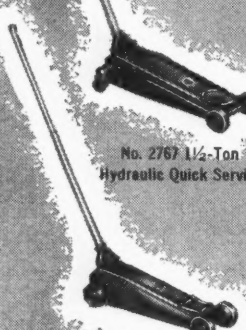
No. 2784 4-Ton  
Hydraulic Service Jack




No. 2782 2-Ton  
Hydraulic Service Jack



No. 2767 1 1/2-Ton  
Hydraulic Quick Service Jack



No. 2711 1-Ton  
Mechanical Service Jack



No. 2799 2-Ton  
Adjustable Axle Support

In the shop, on the driveway and out on the road, you must have speedy, trouble-free lifting equipment to make money in the service business today.

For this, Ajax offers you the finest line of time-savers and profit-boosters your money can buy. In this dependable, time-proven "Coverage Line," you will find a jack for your every need.


Rugged, fast-acting hydraulic and mechanical service jacks, from 1 1/4 tons capacity to 4 tons, give you speedy, safe, efficient service whether it's one wheel you want to lift, or an entire end.

Ajax "Silver Horses"—famous, low-cost, heavy-duty, adjustable axle supports—release your valuable jacks for use on other jobs. Their large, stabilized bases assure the safety of your mechanics.

See the complete Ajax line at your Ajax Jobber or write for catalog.

**AJAX AUTO PARTS CO.**

RACINE, WISCONSIN



**AJAX—"THE COVERAGE LINE" OF FINEST QUALITY JACKS**





for air-drying or baking with...

## MARTIN-SENOUR SYNTHOL ENAMELS

*you get*  
**UNIFORM  
PERFORMANCE**

### IN SYNTHOLS factory-matched factory-packaged PAYS OFF IN RESULTS

Whether you air-dry your Synthol Enamel jobs or feature Baked Enamel Finishes in your shop, you'll want the advantages of special Martin-Senour formulation.

With Martin-Senour Factory-Packaged Synthol Enamels you can depend on getting *uniform* performance. You'll get the right flow, the right "build" to give the deep gloss and *durability* that makes satisfied customers.

The clear, clean colors are formulated for perfect "over all" refinishing—but of equal importance, they are ideal for "panel-repairing" of original baked-enamel finishes.

**For baking:** simply use 25% M-S Syn-Bake Converting Reducer No. 8038. It's simple, easy and sure!

At Your N. A. P. A. Jobber's Now

## MARTIN-SENOUR

2520 South Quarry Street, Chicago 8, Illinois

*Factory Packaging* ... is the only Positive Control from Factory to Finisher



### MARTIN-SENOUR SYNTHOL REDUCERS

**8001 FAST DRY**—For cold weather, or where dust conditions require quick drying.

**8002 FLEET REDUCER (slow)**—Preferred for truck and commercial work. Or in hot, humid weather.

#### NEW! NEW! NEW!

**8004 SYMMETRO-FLOW REDUCER**  
—Maximum flow with greater freedom from "runs" or "sags". Includes newest solvent developments in a precision-balanced reducer that produces phenomenal flow and minimizes orange peel—without retarding dust-free or tack-free drying time.



HELLER

# VIXEN

Reg. U. S. Pat. Off.

**MILLED  
CURVED-TOOTH  
FILE**

MADE ONLY  
BY  
**HELLER**

*Helps turn out  
body and fender  
dent work  
five-ways better!*

- ✓ Smooths as it cuts
- ✓ Genuine shearing action, without scraping, tracking, grooving or scratching
- ✓ Removes more metal more easily
- ✓ No loading or clogging of teeth
- ✓ Handy holder easily curves "VIXEN" in or out to fit surface contour



Only a milled curved-tooth "VIXEN" can be resharpened again and again! This means that "VIXEN" costs less in the long run!

**Insist on a "VIXEN"  
...in the new white package**

"VIXEN" now comes in a new, white, sealed, riveted envelope... packaged in a white, easily identified carton. This protects you against imitations when you buy. When you see these *white* containers, you're sure you're getting a genuine Heller "VIXEN."

For autobody filing at its best, ask your jobber for the popular "VIXEN" babbitt cut.

**HELLER BROTHERS COMPANY**

*America's Oldest File Manufacturers*  
Newark 4, New Jersey... Newcomerstown, Ohio



VIXEN FILES ARE MADE ONLY BY HELLER

## Spots . . . . . Continued from Page 45

compare your price for cleaning the entire interior of the car with the cost of having just one seat cleaned. Clinch the sale by demonstrating a clean panel of an old display seat compared with a dirty panel on the same seat.

Start the job by removing spots. Be sure what caused the damage before applying the cleaner. For example, blood stains will set if cleaned with hot water or soap and water, and consequently will become almost impossible to eradicate.

Don't be too generous with cleaning fluid on upholstery which is padded with foam rubber, which is vulnerable to volatile cleaners. Use the following method when using this type of cleaner. Brush the upholstery to remove loose dirt. Then wet a clean cloth with the solution and wring it out and allow the fluid to evaporate slightly. First tap the soiled area with the cloth rather than rub it. This will pick up the loose dirt that brushing wouldn't remove. Repeat this procedure until no more dirt can be removed this way. Then moisten another clean cloth with cleaner and allow most of the fluid to evaporate. Rub the spot lightly from the outer extremities toward the center to prevent spreading the spot. Then give the area a final brushing. While volatile cleaners are generally satisfactory for removing spots, some jobs require different methods.

Vacuum the entire interior including the seats, side panels and

head lining. This is important to remove accumulated dust and surface dirt. Then obtain a suitable cleaning material to go over all the upholstery. A number of excellent products designed for this purpose are now on the market. In fact, some manufacturers have developed equipment especially for cleaning upholstery.

Usually spot removers and upholstery cleaners are separate and distinct products. The latter will often be found to have a soap or detergent base. The cleaner makes a suds which is applied to the upholstery with a sponge or soft brush. It is then wiped clean with a towel or sponge and finally vacuumed.

This service, offered on a flat rate basis or priced according to the job, will be advantageous to the shop as well as to the customer.

**A pu-r-r-ing motor...**



**MEANS A SATISFIED CUSTOMER**

**Make Thermostat Replacement  
Part of Every Cooling  
System Check-Up**

# DOLE

## THERMOSTATS

**New DV Type  
Postwar Design for  
Modern Sealed  
Cooling Systems**

**THE DOLE VALVE COMPANY**  
1901-1941 Carroll Avenue • Chicago 12, Illinois  
Representatives in Principal Cities

**CONTROL WITH DOLE**



**Stanley.**

**"What this place needs is another salesman or two. It's all George can do to see that prospects don't get away."**



## Radiators . . . . . Continued from Page 49

with a solution that boils the dirt out.

After the tank and core have been cleaned inside and out, the radiator is reassembled and tested for leaks, and finally the core is sprayed with special radiator paint. He also recommends that the block be cleaned at this time, and in most

cases the water distribution be replaced if car is so equipped. He can turn out a complete job in about 2 hours if the core is off the car.

When using a torch and solder to repair a core, first clean the metal around the leak with a steel wire brush, knife, or file until the metal is bright and shiny. Cleaning is an

important step because solder will not stick to metal that is greasy, tarnished, dirty, or coated with oxides. Now apply flux to the cleaned surfaces. Any good commercial paste or liquid flux will do. When using a torch, play the flame over the fluxed area, but don't actually touch it to the metal. Heat the metal for a few seconds, then withdraw the flame and touch the solder to the heated area. The solder will melt and flow over the surface when the metal is hot enough to begin work. If it does not run properly, heat the metal a little bit more and try again. When the solder flows smoothly, rub the end of the wire gently over the hot metal surface and you will melt enough solder so that it flows over and around the leaky spot and creeps down between the parts. When the solder is thoroughly melted and spread out evenly, let it cool. If the solder has not spread out evenly, wipe it with a damp cloth and spread a little flux around the hole. Heat again, with the flame, to spread and smooth out the solder. When the job is finished, clean the surface well with a damp cloth to remove any flux. The core should be submerged in water and air pressure applied, to examine for leaks. If leaks haven't been completely sealed, repeat the job and melt more solder on the leaking spots. When soldering the core itself, care should be taken not to overheat as overheating at the core will cause other leaks.

**ONE DOES EVERY JOB!**  
CUTS YOUR INVENTORY  
... INCREASES PROFITS



**SEALZIT** Seals Leaks...Waterproofs Ignition . . . Protects Batteries...Preserves Chrome

Sealzit is a waterproof, crystal clear acrylic plastic that is flexible, permanent and dries quickly. It is easily applied to leaks with eye-dropper. *Penetrates* to seek out and seal up windshield leaks . . . replaces old fashioned gum sealers. Waterproofs ignition wires . . . makes starting easier. Brushed on battery terminals it prevents corrosion. Keeps chrome sparkling . . . use as touch-up on bumpers and hub caps. Seals up leaks in station wagon bodies and tops.

Multi-Use Kit contains eye-dropper, brush and bottle of Sealzit. Builds your profit potential.

Write for  
**FREE sample of**

WINDSHIELD

**SEALZIT**

A PRODUCT OF  
**KRYLON INCORPORATED**

PHILA. 32, PA.





#### 1ST SAVING

The right bearing for the job. Whether it be a passenger car, truck, bus or tractor engine—there is a Monmouth Engineered Bearing specifically designed and constructed for the type of service the engine must give.

#### 2ND SAVING

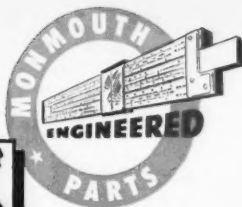
Installation easier and faster. Because these bearings are exact duplicates of original equipment bearings, time is saved in application.

#### 3RD SAVING

Minute-man delivery. Monmouth Engineered Bearings are stocked and sold coast to coast by N. A. P. A. Jobbers.

Save overall on overhaul jobs  
with *Engineered* bearings

*Your  
NAPA Jobber  
is a Good-Man  
to Know!*



**THE CLEVELAND GRAPHITE BRONZE COMPANY**  
REPLACEMENT SALES DIVISION  
6545 CARNEGIE AVENUE  
Cleveland 3, Ohio

#### 4TH SAVING

No customer complaints. Winning performance\* of Monmouth Engineered Bearings eliminates adjustments, results in continued customer satisfaction — enhances your reputation for quality work. To save and profit—specify Monmouth Engineered Bearings and Replacement Parts.

#### NOTE:

At the 1950 Indianapolis Speed Races, engines of the first ten cars were fitted with our Clevite 77 Bearings.

**FOR ENGINE BEARINGS  
CLUTCH PLATES AND PARTS  
CHASSIS PARTS**

**Monmouth**  
Trade Mark *is the name*

## Dead Shocks . . . . . Continued from Page 53

slip in as illustrated. (Fig. 5.)

A large drill press with a special jig is used to rebore for the shaft bushings. After reboring the holes are line-reamed. (Fig. 6.) Most shock-absorbers are worn egg-shaped and require reboring so that an oversize bushing and standard shaft can be used. (Note the housing and new bushing at lower right

of Fig. 6.) The new bronze or oil-ite bushings are pressed into place. The housing is now ready for re-assembly.

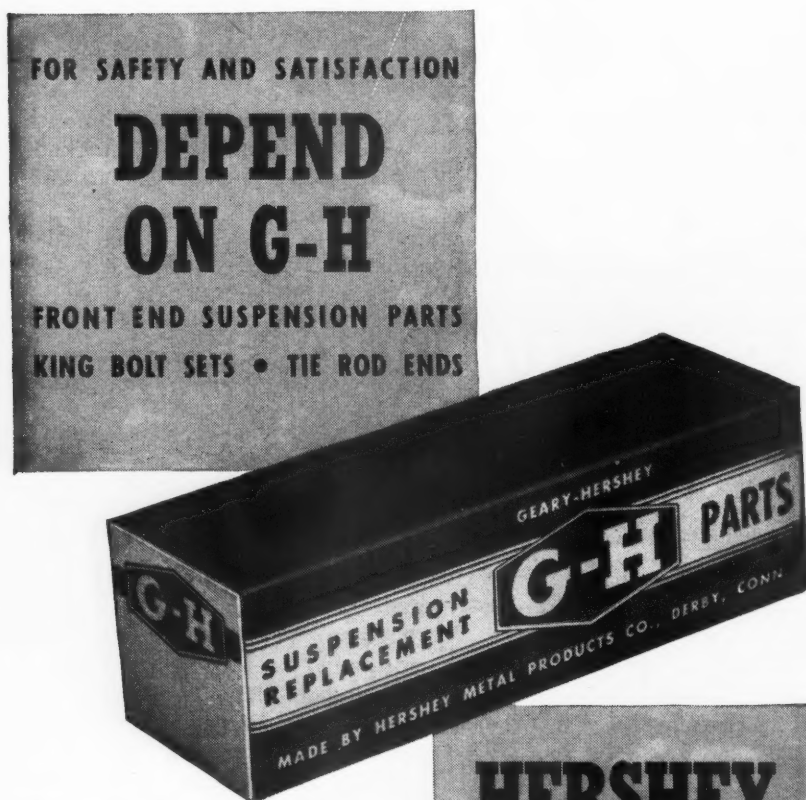
The control arm shaft is installed first on the press. (Fig. 7.) The shaft has three splined surfaces, one for each side of the arm and one for the rocker arm. Thus, when the control arm moves, it rotates

the shaft which carries the rocker arm. All these parts move as one, working against the resistance of the piston.

Notice that the new pistons, shown in Fig. 5, are different in design from the original pistons. (Fig. 4.) The replacement parts are half-piston supplied in pairs. After the unit has been reassembled, the control arm is replaced by placing the housing in a special jig and driving on one side of the arm. The other side is then pulled on by a bar, as shown in Fig. 8. The shock absorber action is tested and then the entire unit, including the arm, checked on an alignment fixture.

Finally the finished unit is dip-painted and tagged for model number.

Accuracy in machining fitting parts is of the utmost importance in rebuilding a shock absorber. While they can be handled singly, a better product can be turned out in less time when an assembly line is set up. When the proper methods and quality parts are used, the resulting product will give thousands more miles of satisfactory performance.



G-H quality is a combination of "know-how," design, construction, heat treatment. G-H parts, as a result, last longer, perform better. Rigid factory inspection of parts protects you and your customers. Steady sales, repeat business and better profits are yours when you "depend on G-H" Safety Parts.

**HERSHEY  
METAL  
PRODUCTS**  
INCORPORATED  
AUTOMOTIVE PARTS DIVISION  
DERBY, CONNECTICUT

### Packard Plant

Packard expects to spend more than a million dollars on plant improvements before the end of this year. The program will include the building of four test cells and a sub-zero laboratory at the proving grounds, installation of new power house equipment and revamping of certain sections of the factory to provide better manufacturing facilities.

### Power Steering

There has been considerable discussion in recent years about power steering for passenger cars particularly since the adoption of low pressure tires. Engineers, however, do not see any immediate possibility of such a development because of the prohibitive cost. They estimated that the added price to the purchaser of a power equipped steering car would be from \$125 to \$150.



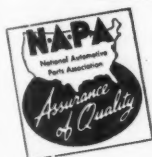


# Want to make More Money?

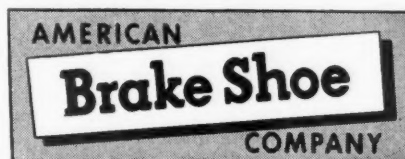
→ Put this new American Brakeblok Program to work in your shop now!

**NO DEAL! NO SPECIAL ORDER!**

It sells brake jobs of all kinds—in *only a minute!* Finds extra business for you—*before pulling a wheel!* It's simple! It's easy! It's complete! If you haven't seen it call your NAPA Jobber at once!



**American**  
REG. U. S. PAT. OFF.  
**Brakeblok**  
**BRAKE LINING**



**AMERICAN BRAKEBLOK DIVISION**  
DETROIT 9, MICHIGAN

ing a sailboat, ain't it?" he grinned to the salesman.

"Just what I said," replied the old man smugly examining the end of his cigarette. He began to talk, but Larry was concentrating on the car and not listening to his spiel at all. He wasn't sure what was wrong and gunned the car up a little faster to try to accentuate the

trouble. As he came up Elm St. and around the bend he was going far faster than he should have been. Suddenly he saw a group of children playing around a pile of leaves burning in the gutter. Fortunately they were on the opposite side of the street, or Larry's swerving car would have come dangerously close. He recognized little Jeanie Mac-

Donald who lived next door to him, and he suddenly felt a lump in the pit of his stomach.

"... drive it like this and get rid of it in a few months," Vinegar Joe was droning. Larry saw red.

"Look, mister," he said. "I don't know who you are or where you come from. But you brought this car into our shop to get it fixed. Drivin' it the way it is is dangerous, so it don't go out of our shop again until it is fixed."

Needled by Larry's tone, the old man sneered. "Nice speech, son. You'll go far carrying that big banner."

A little abashed by his own outburst, Larry nevertheless stuck to his guns. "I'm no speech-maker," he said in a quieter tone. "Maybe you don't care how it hurts the other fellow when he gets hit by your car, but I'd think you'd care about what happens to you for hitting people."

"No driver wants to hurt people," the old man said soberly. "It's just that we drive so much these days that we forget how dangerous a car can be."

When they reached Pop's shop again, Larry drove the car directly to the front end stand and went in to get Pop. "I'll check it all over again, Pop," he said. "But I'll be darned if I think it's in the front end."

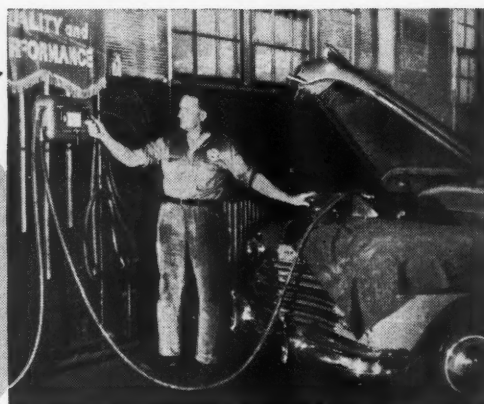
Pop ambled back into the shop with Larry as they talked. He

(Continued on page 84)

## Looking for something to **BUILD NEW BUSINESS...** **BOOST YOUR PROFITS?**



Service Master Hypressure JENNY Combination Steam Cleaner and Cooling System Flusher, with built-in Steam Thoro-Purge.



The minute you put these two profit-partners to work for you, you'll have dozens of extra-income services to offer your customers—services that will bring new customers in and keep them coming back. You'll have all the advantages of Hypressure Jenny for steam cleaning auto motors, front-end grille work, springs, frames, under-chassis areas, plus many other jobs that bring \$12 or more extra profit an hour. And in addition you'll have marvelous Steam Thoro-Purge for reverse-flushing clogged cooling systems.

With Steam Thoro-Purge, you can increase your business as much as \$10,000 a year on cooling system cleaning alone.

You'll make still more money by saving time, labor and expense cleaning shop equipment, tools, driveways, walls, windows, etc. 10 times faster than by hand methods.

If you're looking for something to build new business . . . boost your profits, here it is!

The FREE BOOKLET, "1001 WAYS TO EXTRA PROFITS" tells all about it. Write for it today!



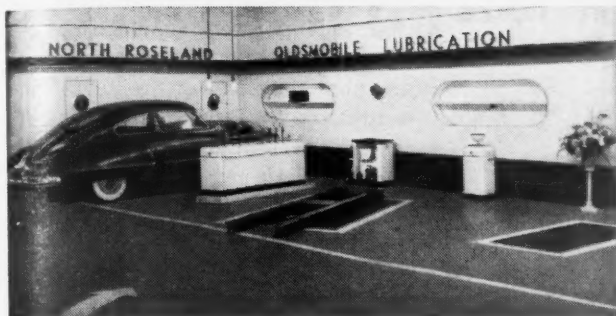
**HYPRESSURE JENNY DIVISION**  
**HOMESTEAD VALVE MANUFACTURING COMPANY**

"Serving Since 1892"

P. O. BOX 95 CORAOPOLIS, PA.



"That's no excuse . . . You heard me blow my horn!" . . .



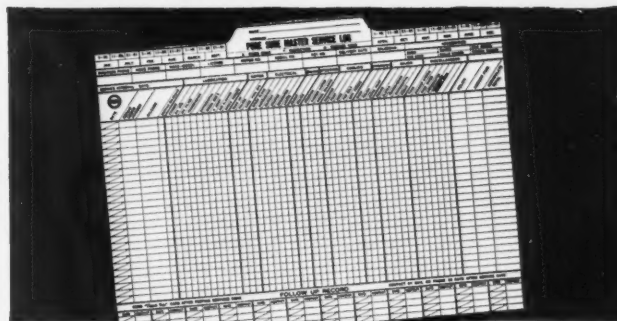
- 1** Pure Oil offers expert assistance in streamlining your lubrication service department



- 2** Pure-Sure Training for your employees (where they learn by doing)



- 3** Pure's exclusive service facts and data (including Step-by-Step procedures)



- 4** Business-building records designed by car dealers (including a completely practical Master Service Log)



- 5** Sales tools and advertising helps (proved effective in building profits)

for you...

## These Profit-building sales Helps from Pure

You get *sure* help to more sales when you stock Pure Oil lubricants.

You get help in training your men to sell more oil and lubrication jobs... step-by-step training to do every lubrication job better. You get help in modernizing your lubrication department... in keeping more useful service records.

You get the advantages of the complete Pure Oil line, including high-quality oils for car dealer branding, approved automatic transmission oils, gear and chassis lubricants, and TBA.

You put new *sureness* in your service. For example, Purelube Premium Quality motor oil combines in one superior lubricant all the qualities demanded by new car owners: amazingly high V.I., low stable pour point, superior cleansing action, anti-corrosive and anti-foaming properties,

Be *sure* with Pure! Cash in on all the wide acceptance of Pure Oil products... all Pure Oil advertising on radio, highway posters and in newspapers. See your Pure Oil salesman or phone your local Pure Oil office today.

**THE PURE OIL COMPANY**  
General Offices: Chicago



Be sure  
with Pure



# Purelube

**THE SURE MOTOR OIL**



noticed the heavy load in the rear seat and the apparent fine condition of the car. "Do much driving on country roads?" he asked the salesman. The man nodded. "Most of my route is back through the country."

"Larry," said Pop bending over. "Here's the trouble." He pointed toward the rear springs. "These

rear springs aren't carrying their share of the load. They're awful weak."

"Look here," the customer put in, his temper rising. "If you think you can take me over like that, you've got another think coming. I came in here to get the steering corrected, not to give my sample kits a softer ride."

"Look, mister," said Pop. "Those rear springs weren't made for a truck. When they sag the way they are now they throw the center of weight too far back and there isn't as much weight on your front end as the designer planned. That throws your caster out of kilter." He turned toward Larry. "Put another leaf in each of those rear springs, then try it out on the road. That's the man's trouble all right."

"An' if you're wrong," said the salesman, "all we'll have to do is try something else, while I'm writing out a check for fixing a couple of springs."

"That's about it, mister," said Pop. "Except for two things: We won't be wrong, and you'll be writing out a check for correctin' your steering. We stand behind all our work."

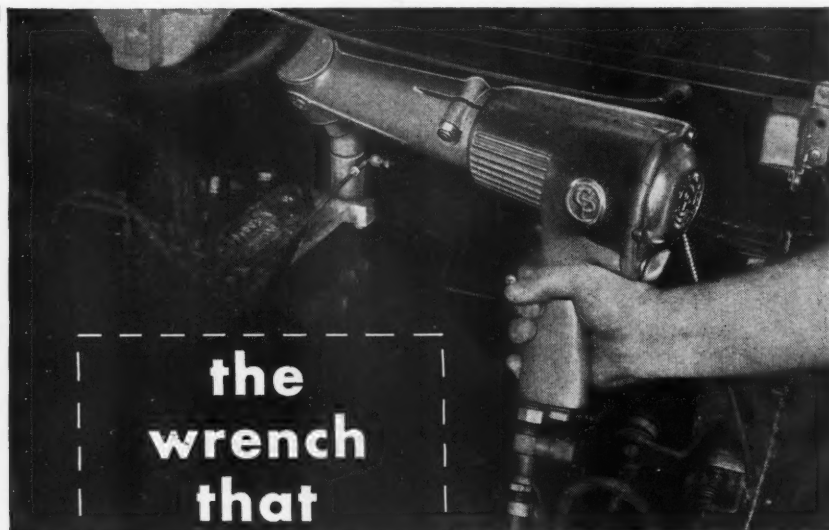
"It'll take me a couple of hours, Mister," said Larry. "There's a new Bob Hope picture in town, or you can stick around and watch me if you want to."

"I can take a hint," replied the stranger, actually smiling for the first time. "I'll be back later."

As Pop watched him stalk out through the door, he said to Larry, "The last time I was accused of bein't dishonest was when Joe Alessandro had just been over from the old country about a year. He bought some parts to fix his own car, an' because he was short of cash I agreed to carry him for a while."

"When I sent him his bill, he came in mad as a hornet."

"'You crook,' he yelled. 'You crook. You chargea me for carryin' hey. You no carry dose parts. I carry 'em home myself. Right on dis shoulder.'" Pop chuckled as he thought of the old days and Larry went back to work.



**reaches  
any bolt**



CP Pneu-draulic Pump powering push-and-pull ram — Here's an easy way to apply a giant's strength. 15-lb Pneu-draulic Pump will power any hydraulic equipment now operated by hand, by merely attaching pump to a compressed air line. Throttle can be controlled by knee, foot, elbow or hand.

Thanks to its detachable angle head, this CP-750 Air Impact Wrench is making easy work of running a cap screw in a mighty awkward spot.

And controllable power assures running on nuts and cap screws to proper tightness.

In the complete line of CP Controllable Air Impact Wrenches there's a size suited to any nut or bolt on car or truck. Capacities: CP-730 to 7/16" bolt size; CP-750 to 5/8" bolt size; CP-770 to 1" bolt size —all are equipped with detachable angle heads.

For still heavier jobs, the CP-365, with a capacity to 1 1/4" bolt size, is available in straight and angle head models.

*Write for full information.*



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TOOL COMPANY**  
General Offices: 8 East 44th Street, New York 17, N. Y.

**AUTOMOTIVE SERVICE EQUIPMENT • FENDER IRONS • ELECTRIC TOOLS  
AIR IMPACT WRENCHES • AIR COMPRESSORS • PNEU-DRAULIC PUMPS**

## Registrations

The U. S. Bureau of Public Roads preliminary estimate of 1950 Motor Vehicle registrations shows an increase of 9 per cent over 1949 for passenger cars and 6.7 per cent for trucks and buses or a total percentage increase of 8.6 per cent. Total automobiles on the road is estimated at 39,565,000 and trucks at 8,349,000, for a grand total of 47,914,000.

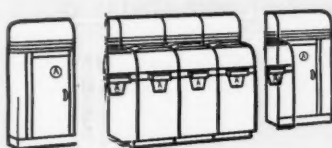
**Pay as You Go—Expand as You Grow...with**

**ALEMITE**

**SECTIONALIZED**

**Lubrication Equipment!**

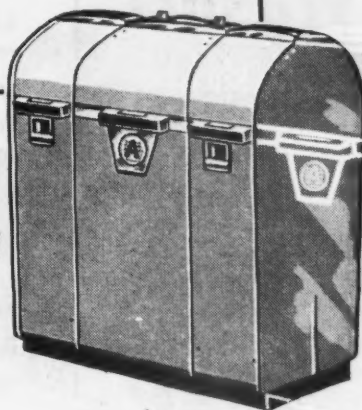
*You can add pumps  
and extend backgrounds  
as you grow!*



*You can add to  
your ceiling reels  
too!*



*Look! You can  
add center  
Alemite units  
as you need them!*



**New Alemite "Atomic" Line Lets You Add New,  
Matching Units To Your Lubrication Equipment  
Just As You Add Rooms or Wings To Your Home!**

Now from Alemite—and Alemite alone—comes this modern, practical way to **PAY AS YOU GO, EXPAND AS YOU GROW!** Here is new flexibility of arrangement you'll find nowhere else. For no other line of lubrication equipment has Alemite's revolutionary **SECTIONALIZED DESIGN**—with all units engineered to match and fit together perfectly.

Start with the number of basic "Atomic" units you want (shown above). Add the backgrounds, reels, cabinets and accessories you desire. Combine them any way you wish . . . to fit your service area *exactly*, regardless of its size or shape. To expand later, just add more matched units. It's quick and easy to do. And your jobber offers convenient terms.

Alemite's far-advanced "Atomic" line features stunning new styling throughout. Luxurious new two-tone finish. Profit-building new efficiency. Ask your jobber for the full story, or write today to Alemite, Dept. J-100, 1826 Diversey Parkway, Chicago 14, Illinois.



**Unconditionally  
Guaranteed for 2½ Years!**

**New "Atomic" Pump With Sealed-In Air Motor**—Only Alemite dares to make such an offer! If for any reason the "Atomic" Pump's factory-sealed power head fails to perform as specified, Alemite will replace it *free* for as long as 27 months after date of purchase. Delivers 35 oz. of grease per minute at room temperature. No air pockets. Low air consumption. Performance proved by 2 years of rigorous field testing!



**ALEMITE**

Look For This Name . . . It Identifies  
The World's Finest Lubrication Equipment



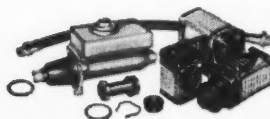
# Only WAGNER has ALL these



## WAGNER CoMaX BRAKE LINING

— offers complete coverage for all your needs . . . in sets, rolls, blocks, slabs and cut segments. A non-compressible, long-wearing lining of uniform texture.

## WAGNER LOCKHEED HYDRAULIC BRAKE PARTS



— a complete line, covering all makes of cars and trucks, including seldom used, slow-moving parts not easily obtainable elsewhere.



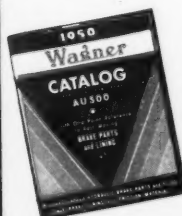
# LOCKHEED brake fluid features and advantages:

- 1 A proven product . . . Used by vehicle manufacturers
- 2 ONE mixture for ALL cars and trucks . . . reduces inventory
- 3 ONE mixture for ALL seasons . . . reduces inventory
- 4 Assures year round operating performance
- 5 Functions in sub-zero temperatures
- 6 Amply lubricates the system over operating temperature range
- 7 Maintains chemical characteristics after long use
- 8 Maintains high operating temperature characteristics
- 9 Mixes with all other approved fluids
- 10 Does not evaporate rapidly
- 11 Is non-injurious to skin
- 12 Does not corrode or rust the system
- 13 Does not cause cups or hose to swell
- 14 Forms no gummy residue
- 15 Nationally advertised in POST and COLLIER'S
- 16 Surpasses S. A. E. Standards
- 17 Has consumer acceptance first in brake fluid sales.
- 18 Available in 12 oz., quart, gallon, 5 gallon, 54 gallon containers
- 19 Warehoused internationally through 25 Wagner Branches
- 20 Available everywhere through leading automotive jobbers
- 21 A product of Wagner Electric Corporation

**You can depend on Wagner quality because Wagner products are used as original equipment by automobile, truck and trailer manufacturers.**

## Wagner Electric Corporation

6498 PLYMOUTH AVE., ST. LOUIS 14, MO.



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Get this up-to-date book covering Wagner CoMaX Brake Lining and Friction Materials, Wagner Lockheed Hydraulic Brake Parts and Wagner Lockheed Brake Fluid.



LOCKHEED HYDRAULIC  
BRAKE PARTS and  
FLUID - NoRoL  
CoMaX BRAKE LINING  
AIR BRAKES - TACHOGRAPHS  
ELECTRIC MOTORS - TRANSFORMERS  
INDUSTRIAL CRANE BRIDGE BRAKES

The accelerator pump, unlike the usual plunger pump, is of diaphragm type. The fast idle mechanism is in the choke housing, no longer exposed on the throttle shaft. The carburetor is of vacuum economizer type as before. The new accelerator pump arrangement, operated partly by vacuum, provides a somewhat leaner mixture for

steady speed level driving.

The Carter vacuum-operated fuel pump, introduced on the Rambler, will be found on all three lines (Hydra-Matic or overdrive equipped cars), the booster type model being supplied on Statesman and Ambassador engines. Nash has found this type of pump to be quieter than previous models. The

mechanical type AC fuel pump will be used on Statesman and Ambassador models with standard three-speed transmissions.

A new type of starter drive has been adopted on Rambler and Statesman models. It stays in engagement on intermittent firing during cold starts.

Ambassador engines have an improved distributor drive with less spark variation and less intermittent knock at low speeds. The drive has less play in the internal mechanism. The tongue-and-groove connector, formerly used, is replaced by a solid shaft.

Changes in the Ambassador overhead valve mechanism are designed to contribute to greater quietness, improved lubrication, and longer life. Redesign of the rocker arm has been made to provide controlled lubrication to the valve and arm. Clearance of the rocker arm and shaft has been increased to reduce noise. In addition, a new type of felt seal is provided on the upper end of all valve guides to control lubrication during idling and at engine starting. A synthetic rubber ring is mounted just above the felt as an oil shield as well as felt retainer. A small stamped collar holds the felt and rubber assembly firmly in place.

Hydra-Matic for the Statesman is basically the same unit as for the Ambassador but contains some modifications. For one thing, fewer clutch plates are used in the rear planetary unit, to assure smooth shifts. On Hydra-Matic Ambassador and Statesman cars the propeller shaft now is of one-piece type, eliminating the center bearing formerly employed.

Steering knuckle support lower pins have been changed to enclose threaded type on the Ambassador and Statesman. This is said to provide a gain in steering ease.

Improved riding comfort has been effected by the introduction of shock absorbers featuring the new principle of "two-stage" valving which is equally effective in hot or cold weather and under adverse road conditions.

The Ambassador muffler now is an oval two pass type, giving better silencing than the straight-through type used formerly.

## THIS HANDBOOK MAKES SOLDERING EASY!

Learn the soldering tricks of experts—*without* any hard study. This revised and up-to-date, 20-page handbook leads you step-by-step to real soldering skill. Time-saving methods, DO's and DON'T's, difficult operations, flux and solder tables, all made clear by 43 easy-to-understand illustrations. NOT a catalog, but a real professional's pocket manual. Send only 10c in coin.

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Only 10¢

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BRAKE LINING - CLUTCH FACINGS

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PARTS FOR FORD  
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**TRICO**  
VACUUM OPERATED  
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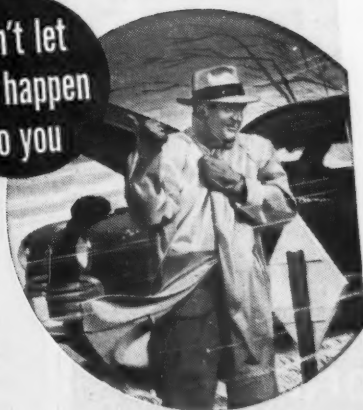
**UNITED**  
FUEL PUMP  
HYDRAULIC BRAKE  
SPEEDOMETER AND  
BRAKE CABLES

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**WISCONSIN**  
PISTONS - SLIDERS

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PISTON EQUIPMENT

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PARTS FOR FORD  
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don't let  
this happen  
to you



**Change Over and Check Up!**

- ✓Electrical System
- ✓Brakes
- ✓Lubrication and Anti-freeze
- ✓Motor and Clutch
- ✓Cooling and Exhaust System
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- ✓Accessories



Quality assured by the national largest  
independent parts organization

in the **POST**  
october 7 and  
november 4



...and in  
your shop



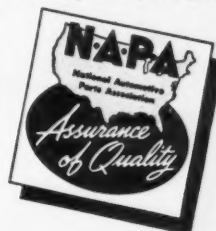
# N.A.P.A is selling for you!

In The Saturday Evening Post October 7 and November 4, powerful NAPA advertisements are again selling your customers the idea of seeing you for a complete mechanical checkup to go with their regular winter changeover. Your customers need this complete change-over-checkup. And NAPA's program goes all the way to help you get a full share of this profitable business. Here's what to do:

Ask Your NAPA Jobber for the big, 25" x 38" tie-in poster shown above. It's the same as shown in The Post. In your shop it identifies you with the national program—sells the quality of the parts you use—and the kind of service you can provide for cars and trucks of all makes. Your NAPA Jobber is the man to know . . . for the tie-in poster . . . and for the fast, comprehensive parts service to back it up!

NATIONAL AUTOMOTIVE PARTS ASSOCIATION • DETROIT 1, MICHIGAN

**N.A.P.A** is the largest Independent Parts Organization in the Industry!





## Henry J. . . . . Continued from Page 40

Both engines are fitted with the 1¼ in. Carter YF downdraft carburetor. Auto-Lite 14 mm spark plugs are used. The clutch is an 8½ in. Borg & Beck. Both AC and Carter fuel pumps have been approved and will be supplied in conventional and booster types as specified. The Carter booster type fuel pump has been released for initial production.

Radiators are of fin and tube type with 9-qt. cooling system capacity for the Six; and 10.8 qt. capacity on the Four.

The chassis frame is of a box-type construction. The transmission is of conventional three-speed synchromesh type, supplied by Warner Gear. The Warner overdrive is available as optional equipment. The rear axle, supplied by

Spicer, is of semi-floating type with standard gear ratio of 4.10 to 1; and 4.55 to 1 with overdrive.

Front suspension is of knee-action type with coil springs and two-way direct acting shock absorbers mounted within the coil spring. A sway bar of torsion type is mounted at the front. The rear suspension consists of five-leaf semielliptic springs with protective covers. Direct-acting shock absorbers at the rear are mounted in sea-legs fashion from the cross member ahead of the rear axle.

Gemmer steering gear of worm and roller tooth type is used. Brakes are four-wheel Bendix hydraulic type with 132 sq. in. of lining area. Low pressure, 5.90 x 15 tires are standard.

The  
**EASIEST**  
nutrunner and  
screwdriver...

# Herbrand

## DRIL-O-DRIVER

converts electric or  
pneumatic drills into  
automatic power screwdrivers



### Herbrand's latest Tool-of-the-Month

- Fits any ¼" electric or pneumatic drill
- Fastens into drill chuck like ordinary bit
- Operates by automatic friction drive
- Only engages when pressure is applied
- Operator controls speed and force of drive
- Slows down and stops when work is driven home
- Operates in either forward or reverse turn
- Handles nuts, bolts . . . and wood, machine, cap, sheet-metal screws

Here's a great new tool to save hours of time and energy at driving nuts, bolts and screws. Drill motor can be kept running as Dril-O-Driver engages only when pressure is applied. Dril-O-Driver locates work faster, drives faster and more safely under precise control of operator. Speeds from 0 to full capacity of drill depend upon pressure on drill. Can be used for other variable speed work.

See it at your local Herbrand jobber,  
or write us for details.

**Herbrand Tools**  
Fremont 7, Ohio

Set DO-10  
Includes Dril-O-Driver,  
¼" drive for sockets,  
and slotted screw driver.

Mechanics Net \$7.95

Every month . . . see the  
**TOOL-OF-THE-MONTH**  
at your Herbrand  
tool distributor



### Civil Defense

Automobile repair shops have been allotted a very definite place in the Civil Defense recommendations by the National Security Resources Board. Service stations are included specifically in suggested plans for setting up emergency fuel storage stations, equipped with auxiliary pumping units. Likewise, suitable repair shops would be designated and equipped for emergency repair for maintenance of vehicles assigned to rescue, fire-fighting, ambulance, evacuation, supply and other emergency work. Moreover, skilled mechanics would be enrolled in trouble-shooting and other emergency teams for keeping emergency transportation rolling in the event of attack or other disaster.

### LUBRICATION



"Will it take long? I have an appointment for a fitting."

# END COOLING SYSTEM TROUBLES



## *New* **FRAM Radiator and Water Cleaner** **STOPS RUST STOPS SCALE** **REMOVES PARTICLES**



**The Only Complete Cooling System Protector.** . . Yes, only this great new Fram Filter does all three jobs. *Inhibits* rust and corrosion. *Softens* the water to stop scale deposits. *Filters* out all harmful solid particles. And, it's harmless to antifreeze or other chemicals.

Two models fit all cars and trucks! Installation easy as A, B, C. Low-cost cartridge can be changed without tools! Economical price covers entire

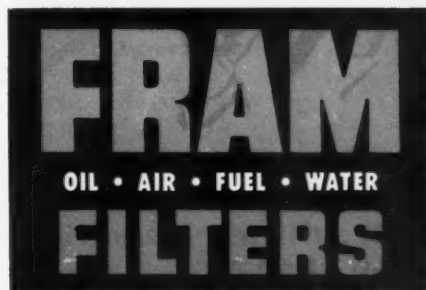
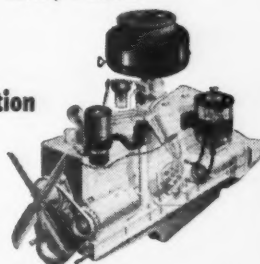
unit . . . all parts, brackets, fittings. Uses standard heater hose. Backed by Fram's famous money-back guarantee!

Get a stock of Fram Radiator and Water Cleaners now, so you'll have them to install during fall change-over. Ask your jobber for the special low-priced introductory offer. **FRAM CORPORATION**, Providence 16, R. I. In Canada: **J. C. Adams Co., Ltd.**, Toronto, Ontario.

### **Only FRAM offers you Complete Engine Protection**

Five great Fram Filters seal out the deadly contaminants that rob miles from engine life . . . remove those formed internally . . . seal in engine power, performance and life.

Stock and sell Fram Oil and Motor Cleaners, Carburetor Air Filters, Gasoline Filters, Crankcase Air Filters and Positive Ventilators to protect your customers' cars.





★ Vinton Freedley

# "SHOWTIM" U.S.A."



★ Bobby Clark

★ Gertrude Lawrence



★ Paul and Grace Hartman



★ Thomas Mitchell



★ Celeste Holm

Star  
Studded  
TV Hit

DODGE

*Among the outstanding stars*



# THE GREATEST SHOW ON

*Supports the*

## TRIPLE ★ PROFIT OPPORTUNITY FOR DODGE DEALERS



★ Tallulah Bankhead



★ Helen Hayes

Now, Dodge Dealers are backed and supported by the greatest show on television—"SHOWTIME...U.S.A."

Through ANTA (American National Theatre & Academy), "SHOWTIME...U.S.A." brings to TV America's top stars from Broadway, Hollywood, famous night clubs, opera and radio.

THIS giant television blockbuster is just another boost to the Dodge Triple-Profit Agreement enjoyed only by Dodge dealers.

Here are three reasons why the Dodge Triple-Profit Dealer Agreement is the

only one of its kind in the industry:

1. 80% of all new car buyers are Dodge or Plymouth prospects!
2. 100% of all buyers' hauling needs are satisfied with Dodge "Job-Rated" trucks!
3. Almost one in every five registered vehicles carries the Dodge or Plymouth name plate—a ready-made service business!

You are invited to write and find out about the unique and worthwhile advantages of the Dodge Triple-Profit Dealer Agreement.

DODGE PLYMOUTH • DODGE "Job-Rated" TRUCKS

DODGE DIVISION OF CHRYSLER CORPORATION • 7900 Jos. Campau, Detroit 11, Michigan

...who will appear on "SHOWTIME...U.S.A."

## Wires . . . . . Continued from Page 51

cars burned last year, wiring again being responsible for a substantial portion of this destruction. Eleven hundred and fifty-seven cars caught fire in Boston in 1949, over 400 of which were victims of defective wiring.

Based on the MOTOR AGE editorial investigation, 44.9 per cent of the 3 to 10 year old cars need wire

or cable replacements of some sort. This doesn't necessarily mean that the wires or cables are completely rotted or worn away, but when installation wears enough for metal to contact metal, there is likely to be sparks and possible fire. Mechanics can help to eliminate this hazard before it starts by selling cables when they are needed.

Advise your men to check wires and cables every time they look under the hood of a customer's car. You're doing the guy a favor and you're doing good business.

## ASI Show

Continued from Page 34

Co., Cleveland, chairman of A. S. I. S. Publicity and Decorations committee, and Herman Teetor, Perfect Circle Co., Hagerstown, Ind., in charge of show theme and decorations, announced the program's familiar slogans will be used in show decorations, but designed for promotion in the show and further development of jobber distribution.

"Jobbers enrolled in the program are saying in every conceivable manner—'Get It From Your Jobber,'" Saks explained. "Our show decorations won't say this to the attending jobbers, naturally. Instead, the banners and posters in the aisles are going to shout—'TELL 'EM AND SELL 'EM'—and every one of the signs will carry one of the program's 'reasons why' the car dealer, garage man, fleet operator and service station operator should buy from his automotive jobber."

"In other words," he continued, "the show and its decorations are going to remind the jobber once again about what he should be telling his customers."

## Transportation

Administration of the Defense Production Act of 1950 in transportation and related fields has been scattered among federal agencies. The Interstate Commerce Commission will handle the problems of motor transportation as such; the Interior Department is responsible for working out any necessary priorities and allocations for petroleum and its products; the Commerce Department is given similar powers over everything not expressly delegated to some other agency—which means control over materials, parts and end production of virtually everything automotive. If the White House decides to impose price-wage ceilings, this goes to a new agency—the Economic Stabilization Agency.

**HAS EVERYTHING IT TAKES  
TO PUT MORE SAFE STOPS  
IN BRAKES!**



*Super 40  
and Super 50*

## Hydraulic Brake Fluids



Meets or exceeds  
S.A.E. specifications.

For safe, long-lasting braking efficiency, the EIS line of Super Brake Fluids remain unexcelled in performance and economy. They meet SAE Specifications . . . mix perfectly with all other approved brake fluids.

Fill your jobs with EIS Super 40 for passenger cars. Use Super 50 SAE Heavy Duty for cars as well as taxis, trucks, buses and tractors operating under extremely tough conditions.

## PACKAGED TO MEET EVERY NEED

Merchandised in a complete range of sizes from 3 oz. refills to 55 gal. drums.

20 EIS Warehouses are ready to serve you promptly through your distributor almost anywhere in the world.



Ask your jobber or write direct



EIS AUTOMOTIVE CORP., Middletown, Conn.







KE



**in 7**

**great plants serving  
the automotive  
industries of  
the United States  
and Canada**



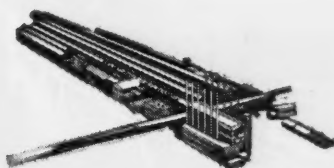
**Kelsey-Hayes Detroit, Mich., McGraw Plant**



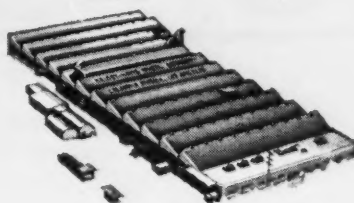
**Kelsey-Hayes Detroit Mich., Military Plant**



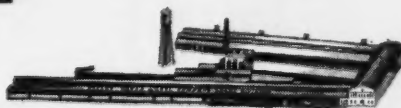
**Kelsey-Hayes Plant in Davenport, Iowa**



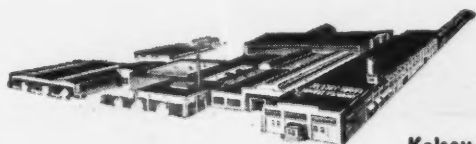
**Kelsey-Hayes Plant in McKeesport, Penna.**



**Kelsey-Hayes Plant in Los Angeles, Cal.**



**Kelsey-Hayes Plant in Jackson, Mich.**



**Kelsey-Hayes Plant in Windsor, Ont., Canada**

**KELSEY-HAYES WHEEL COMPANY PRODUCTS:**

- **Wheels—Hub and Drum Assemblies—Brakes—Vacuum Power Brake Units for Passenger Cars, Trucks and Buses**
- **Wheels—Hubs—Axles—Misc. Parts for Farm Implements**
- **Matched Wheel, Hub, Drum and Electric Brake Assemblies for Light Commercial and House Trailers**

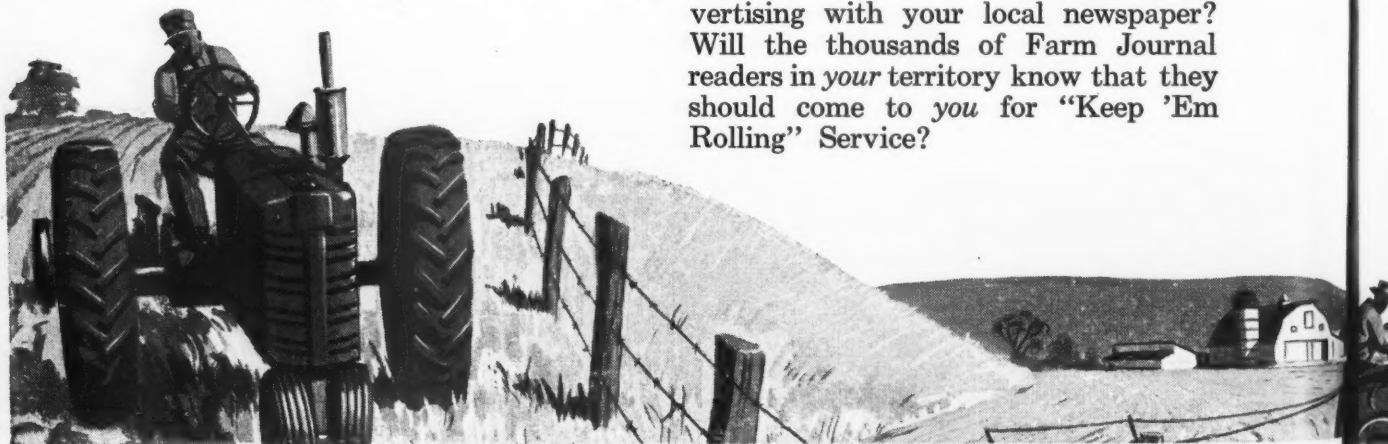
# A-A-A-ALL



## FARM JOURNAL'S GREAT NEW AUTOMOTIVE AND FARM EQUIPMENT MAINTENANCE PROGRAM

Time is getting short, but there's still enough left to get in on "Keep 'Em Rolling." Are you ready? Are you all set to go? Do you have all the sales tools Farm Journal is providing? More than 98,000 tie-in packages have been sent

out already to automotive retailers and jobbers. Did you get yours? Do you have your streamers? Your green flag stickers? Do you have the "Keep 'Em Rolling" newspaper mats? And, if so, have you worked out a schedule of advertising with your local newspaper? Will the thousands of Farm Journal readers in *your* territory know that they should come to *you* for "Keep 'Em Rolling" Service?





# ABOARD!

Response to "Keep 'Em Rolling" has been terrific. It has come from the entire automotive industry...dealers, jobbers, manufacturers, automotive associations, the entire TBA group, farm associations, farm implement and tractor manufacturers and dealers. They all say that "Keep 'Em Rolling" is just what is needed...that it is good business for agriculture and good business for the men who sell and service the cars, trucks, and tractors that keep agriculture prosperous. They recognize it as an educational venture that no single dealer, no single jobber, no single manufacturer could possibly have undertaken alone. But the automotive industry is not alone in backing this program. Newspapers and Chambers of

Commerce, too, are getting behind it. For they both have a stake in the future of the farmer and in the merchants who depend for a living on out-of-town trade. It's a smash hit already. And it's going to get bigger and bigger.

October 18. That's the date your customers will receive Farm Journal's November issue. *That's the date* they will read the first editorial on Protective Maintenance (others are already in the works). And they will respond. Farm Journal is the bible of American agriculture. It covers your customers like a local newspaper. Make sure you are tied in tight with the program by that date. That's the way you will get action. All aboard... "Keep 'Em Rolling."

## IF YOU DO NOT KNOW ABOUT FARM JOURNAL'S "KEEP 'EM ROLLING" PROGRAM...

*This, briefly, is the story. Farm Journal, the largest-selling magazine in America's greatest automotive market...with the largest rural circulation of any magazine in America, with coverage like a local newspaper in the best agricultural areas...is going all out to do a job for you. The November issue will carry the first in a series of feature editorials promoting the importance of better maintenance, promoting you as the person to go to for service. It will reach and SELL your best automotive and farm equipment customers. Everyone's behind it—the entire automotive and farm equipment industry (manufacturers, distributors, dealers), newspapers, Chambers of Commerce.*

*We have prepared a complete kit of tie-in material for your use. It has already gone off to more than 98,000 automotive retailers and jobbers. If by any chance we have missed you, don't YOU miss this opportunity. WRITE, PHONE, OR WIRE.*

DEALER SERVICE DEPARTMENT

**FARM JOURNAL**

WASHINGTON SQUARE, PHILADELPHIA 5, PA.



# STOCK THE JACK THAT SELLS ITSELF!

## THE SAGINAW RECIRCULATING- BALL BUMPER JACK—FITS ANY CAR— UNEXCELLED FOR QUALITY, SAFETY, EASE OF USE

All work and no play makes this jack a swell buy. Best of all, your customers *know* it the minute they *see* it operate.

This Saginaw Recirculating-Ball Bumper Jack is the safest, sturdiest bumper jack ever built. Check these features against any other jack your customers might have:

**STRONG**—pressed steel frame—solid—rugged. Sturdy, rigid base.

**SAFE**—handle can't spin when car is being lowered.

**SMOOTH**—rolling balls mate screw to nut—continuously reduce friction.

Let your customers see it, try it; they'll buy it. Call your United Motors distributor now.



**A CHILD CAN OPERATE IT**  
Rolls up the weight easily,  
safely—can't slip.

**ALWAYS READY FOR USE**  
No fluid to leak—nothing to  
get out of order.

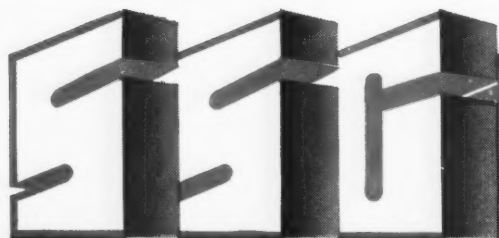


### TESTED AND PROVED PRINCIPLE

The Saginaw Recirculating-Ball principle has been proved in over a quarter million bumper jacks and over a million automotive steering gears.



Saginaw Recirculating-Ball Bumper Jacks are available through United Motors distributors. Call yours today!



**PRODUCTS**

**Saginaw**  
STEERING GEAR DIVISION  
General Motors Corporation, Saginaw, Michigan

STEERING GEAR AND LINKAGES • TURN SIGNALS  
PROPELLER SHAFTS • TRANSMISSION CONTROLS

## Calendar of Coming Events

Oct. 13-14—Tri-State Convention (Del., Md., Pa.), Haddon Hall Hotel, Atlantic City, N. J.

Oct. 15-16—New Mexico Auto Dirs. Assn., Carlsbad, N. M.

Oct. 15-17—Tennessee Automotive Assn., Memphis.

Oct. 16-17—Georgia Automobile Dealers Assn., General Oglethorpe Hotel, Savannah.

Oct. 16-18—Society of Automotive Engineers Transportation Meeting, Hotel Statler, New York.

Oct. 16-20—National Safety Congress and National Safety Council exposition, Chicago.

Oct. 17-18—Federation of Automobile Dealers Assns. of Canada, Toronto, Ont.

Oct. 18—Automobile Old Timers Annual Dinner, Waldorf-Astoria Hotel, New York.

Oct. 22-24—Florida Automobile Dealers Assn., Biltmore Hotel, Palm Beach.

Oct. 23-24—Minnesota Automobile Dealers Assn., St. Paul Hotel, St. Paul, Minn.

Oct. 22-28—National Automobile Dealer Week.

Oct. 23-24—Ohio Auto Dealers Assn. meeting, Neil House, Columbus, Ohio.

Nov. 8-12—National Used Car Dealers Assn. convention, Baker Hotel, Dallas, Tex.

Nov. 13-15—Automotive Trade Assn. of Virginia, John Marshall Hotel, Richmond.

Nov. 15-16—Oklahoma Automotive Dealers Assn., 17th annual meeting, Tulsa.

Dec. 1-2—Montana Auto Dealers Assn., Rainbow Hotel, Great Falls.

Dec. 4-8—Automotive Service Industries show, Navy Pier, Chicago.

Jan. 7-10, 1951—National Auto Dealers Assn. convention and exhibition, Miami.

Jan. 25-28—Fourth Annual Nat'l. Hot Rod and Motor Sports Show, Los Angeles Nat'l. Guard Armory.

Jan. 27-Feb. 3—Milwaukee County Auto Dealers Assn., Milwaukee.

Feb. 15-22—Philadelphia Automotive Trade Assn., Commercial Museum, Philadelphia.

Feb. 17-25—Chicago Automobile Trade Assn., International Amphitheatre, Chicago.

March 2-8—Greater Kansas City Motor Car Dealers Assn., Municipal auditorium, Kansas City.

Mar. 10-18—Seattle Auto Dealers Assn., Field Artillery armory, Seattle, Wash.

Mar. 17-25—Indianapolis Automobile Trade Assn., Cattle Exposition Bldg., State Fair Grounds.

Mar. 21-24—Pacific Automotive Show, Civic Auditorium, Seattle, Wash.

Apr. 26-29—Southwest Automotive show, Oklahoma City.

May 30-Sept. 9—World Transportation Fair, Santa Anita Park, Arcadia, Calif.

May 31-June 2—Washington State Auto Dealers Assn., Winthrop hotel, Tacoma.

Chilton's MOTOR AGE, OCTOBER, 1950

# BOWES Chemical

## TUBE REPAIRS

### are Faster-Safer more Dependable



When a product has been in nation wide use for more than 30 years . . . then it must have merit. Millions of tubes have been repaired the Bowes "Seal Fast" way over this more than 30-year period, and the fact that our volume increases every year must be pretty good proof of the efficiency of the Bowes Chemical Seal tube repair method.

Bowes Chemical Tube Repairs are faster, safer, completely dependable. Requiring no heat, gasoline or cement, a Bowes Chemical Tube Repair can be made fast—actually in a matter of seconds. This means time-saving advantage for you and your customers . . . And once on the tube, a Bowes Chemical Repair *stays put*—on synthetic as well as on natural rubber.

Note the handy dispenser cabinet at the right. It is designed for quick service and convenience, providing a safe place for all the material you need for safe, profitable tube repairing service.



*New!*

## MORE CONVENIENT TUBE REPAIR CABINET

This cabinet, only 13 inches wide, contains 4 sizes of Bowes keen-beveled patches, sheet rubber, solvent and cleaner, etc. . . . enough material to do over \$200 worth of tube repair business . . . and all this for an amazingly small investment.

## MAKE FRIENDS and.. More Profit WITH BOWES CHEMICAL TUBE REPAIRS

*Sure-*

I want MORE profits. If you think your distributor can prove to me that I CAN make more profits and more friends with Bowes Chemical Tube Repair Service, send HIM on. No obligation, of course. I agree ONLY to listen.

Name.....

Address..... City..... State.....

BOWES "SEAL FAST" CORPORATION • INDIANAPOLIS 7, INDIANA



BOARD'S DAIRYMAN

THE NATION

The Progressive Farmer

Farm Journal

PLAY SAFE!



AC

OIL  
FILTERS

Dirt-Proof  
YOUR ENGINE OIL

**This is AC  
Oil Filter month!**

A tremendous sales campaign is on in October. Back of your participation is a smashing national advertising program featuring the picture shown above—plus timely and catchy point-of-purchase advertising for you.

Your window poster is reproduced above. With it, AC gives you special and timely sales suggestions that are easy to use.

Tie into this giant sales operation—it means extra profits.

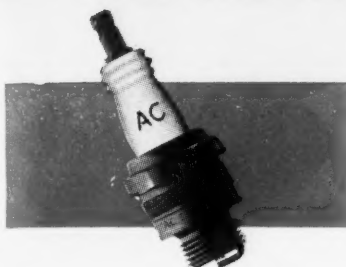
Your jobber has the facts.

THE SATURDAY EVENING  
POST  
Successful  
Farmer

Capper's Farmer  
Collier's

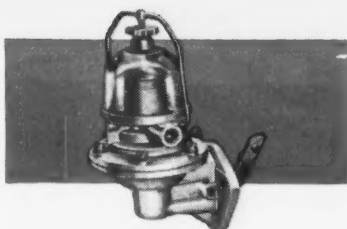
Over 54,000,000 Readers of AC Oil Filter Ads

# 6 MORE OCTOBER SALES BUILDERS



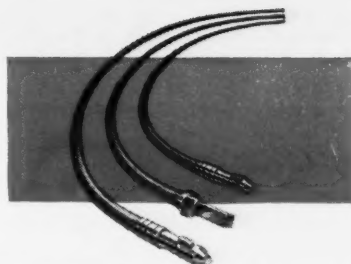
## AC Spark Plugs with patented CORALOX Insulator

More and more vehicle owners want AC's with **CORALOX** Insulator, greatest spark plug advancement since the one-piece plug. Increase your October service sales by replacing worn plugs with widely advertised AC's, with **patented CORALOX** Insulator.



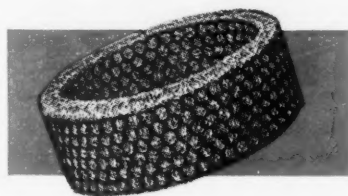
## AC Fuel Pump, "Heart of the Fuel System"

20,000,000 Fuel Pumps need replacing every year. Get your share with AC, the oldest nationally advertised Fuel Pump. Your AC wholesaler can show you how to make big profits with a very small inventory of fast-moving types.



## AC Speedometer Cable and Casing

AC Cable and Casing are original equipment on half the cars on the road. Their superior quality makes them ideal for replacement. Tailor-made assemblies are packaged for your convenience. Bulk cable and casing, with parts, also available.



## AC Air Cleaners and Elements

Another field in which AC leads in equipment volume. Big replacement element market. Heavy duty AC Air Cleaners for cars, tractors and trucks are available through your AC wholesaler.



## AC Flexible Gasoline and Oil Lines

This complete AC Make-up Kit is for dealers who prefer to make their own flexible line assemblies. Tailor-made assemblies are also available, with an attractive Wall Merchandiser which stocks and sells. Sell new lines when you install Filters and Fuel Pumps.



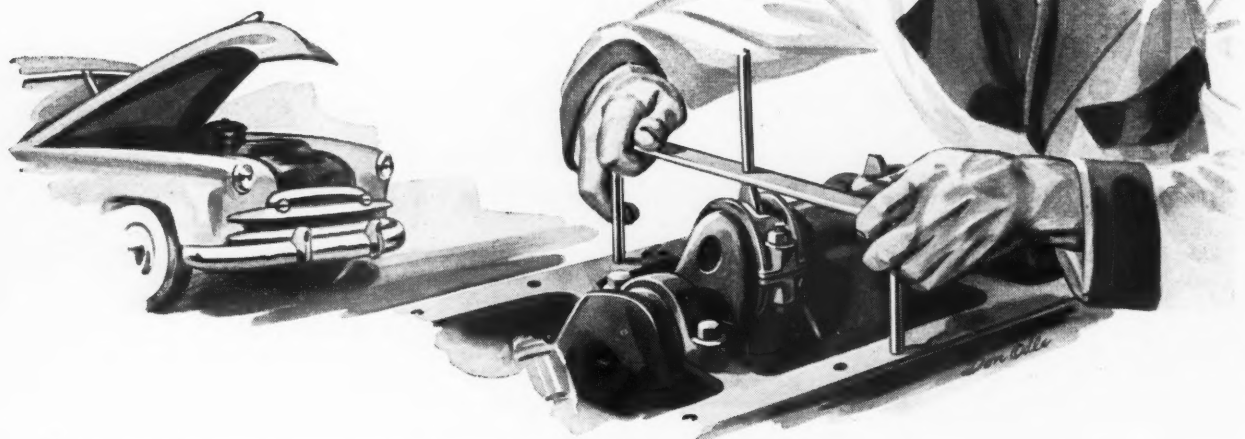
## AC Gasoline Strainers

Put this AC Counter Cutout on your showcase. It sells. The AC Strainer Element is fibre disc, impregnated with Bakelite, for definite and controlled porosity. Every engine needs a good gasoline strainer, to protect the carburetor.



AC SPARK PLUG DIVISION • GENERAL MOTORS CORPORATION

# You know the job's done *right* with **KENT-MOORE** SPECIAL SERVICE TOOLS

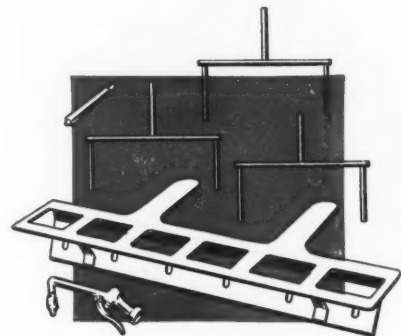


It's a fact! On nearly every major repair job, you run up against a number of important operations that just can't be done efficiently or accurately with ordinary shop tools and equipment. And no matter how you try to get by these operations with improvised makeshift devices, you'll find that nothing can take the place of Kent-Moore Special Service Tools. For you see, Kent-Moore Tools are developed in cooperation with leading car manufacturers to meet essential factory-recommended service requirements. Each tool is designed to perform a specific operation for which no adequate standard tool exists. And each one is built to do its particular job quickly, easily, accurately to assure proper service at a fair "flat-rate" price with positive profits for you. The new 1950 Kent-Moore Composite Tool Guide contains complete catalog information on all of these essential Special Service Tools. Send for your copy today!

## Kent-Moore ORGANIZATION, INC.

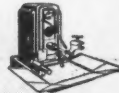
GENERAL MOTORS BUILDING • DETROIT 2, MICHIGAN

Sales and Service Engineering Representatives in Principal Cities Coast-to-Coast



**CHEVROLET OIL NOZZLE CHECKING TOOL SET (J 2130-B)**—This Kent-Moore Special Service Tool is designed to permit accurate checking of oil nozzles, dippers and troughs to determine proper clearances, depths and nozzle aim. In accordance with the car manufacturer's specifications, its use is required **every** time the oil pan is removed to assure correct lubrication and proper engine performance. Saves time, saves labor, eliminates errors and needless damage to parts. Applicable to all Chevrolet passenger cars and truck models from 1937 through 1950.

Price: \$23.95 less 5% cash with order  
F.O.B. Jackson, Michigan



ENGINEERS AND MANUFACTURERS OF SPECIAL AUTOMOTIVE SERVICE TOOLS AND EQUIPMENT





## Auto-Lite Pump

Continued from Page 72

punch. With the pin removed the lever and lever return spring can be taken out. Removing the lever allows the diaphragm assembly and spring to be pulled out.

Clean all parts in cleaning compound and allow to drain. Inspect the lever housing for cracks and other damage, and make sure that the diaphragm flange and mounting flange are smooth and flat. Inspect the diaphragm on both sides, especially near the edges of the diaphragm plates and around each screw hole. Inspect the pull-rod oil seal and examine the rubber carefully by pinching it with the fingers to determine whether it is cracked or punctured. If the diaphragm is defective in any way, it should be replaced. Inspect the pivot pin to be sure that the ground surface is not scratched or marred and make sure that there is sufficient material topeen the end after assembly. If there is a deficiency in any of these conditions, or if the pin is not a tight fit in the housing, replace the pin.

If a new diaphragm assembly is being installed, inspect the oil seal as above to make sure that there are no pinholes that could leak oil. Hold the diaphragm assembly and diaphragm spring in position in the lever housing with the oil seal and its spring properly placed. Insert the lever and lever spring pad and then install a suitable mandrel through the pivot pin hole to hold the parts in position. Place the pivot pin in place. Place the washer over the end of the pin and install the lever return spring.

**Valve Housing.** Remove the screw in the center of the valve retainer. Remove the valves and valve gasket. Clean all the parts thoroughly with a suitable cleaning compound and allow to drain.

Clean the screen on the inlet valve and replace the inlet valve assembly if the screen is damaged. Inspect the valve seats and discs.

Place the new valve seat gasket in position in the housing and insert the valves. The inlet valve

(Continued on page 104)

# "SERVI-CARS are a must in Our Business"

## ...say GREENLEASE-MOORE

### Cadillac-Chevrolet Dealers, Oklahoma City



At right, Mr. Townsley, Service Manager of Greenlease-Moore, and the Company's three Servi-Cars.

**B**USINESS-BUILDING Servi-Car users everywhere agree with Greenlease-Moore of Oklahoma City, that the easiest way to increase volume and please customers is with modern Harley-Davidson Servi-Cars.

Servi-Cars give you the jump on competition by enabling you to provide prompt car pick-up and delivery. They increase your service business because the whole town becomes your territory — and wherever your Servi-Cars go they advertise *you*. Servi-Cars also save time on parts and accessory pick-ups, keep costly mechanics profitably busy, and bring in many prospects for new and used cars and accessories.

Now, more than ever, you need the selling aid of Servi-Cars. Ask your Harley-Davidson dealer to call on you with complete information today, or write.

**HARLEY-DAVIDSON MOTOR COMPANY**  
Department MA, Milwaukee 1, Wisconsin

# SERVI-CAR

## Service Sells More Service

## Auto-Lite Pump . . .

Continued from Page 103

screen should be down and on the "in" side of the housing. The outlet valve should be installed with the spring and disc down. Place the valve retainer in position and tighten the center screw. Inspect it to determine whether the valve retainer is pressing down on both sides of each valve.

**Assembly of the Pump.** Place the valve housing in position on

the lever housing so that the untapped hole in the valve housing lines up with the tapped hole in the lever housing directly under the lever. Press the two housings together and install the flange screws and heat shield stud without tightening them. Hold the pump in a vise by mounting the flange, taking care not to damage the gasket face of the flange. Press

the operating lever down beyond the normal stroke and tighten all the flange screws including the heat shield stud.

**Testing the Pump.** Using the new flange gasket mount the pump on the engine and connect the fuel lines. Install a "T" connection in the fuel line at the carburetor and connect the line to the "T." Install a #44 carburetor float seat orifice on the end of the line with a shut-off valve between the "T" and the orifice. Start the engine and operate it at idle speed, open the shut-off valve completely and measure the amount of gasoline which flows from the orifice in one minute. If this is over 1½ pints the capacity is sufficient.

Connect the pressure gage to the "T" and operate the engine at idle speed. The pressure should be between 2½ and 5 psi. Repeat the test at an engine speed corresponding to 40 mph. The pressure should be between 2½ and 6 psi. If the pressure is low correct it by using a stiffer main diaphragm spring. If the pressure is high remove the pump, loosen all the diaphragm screws including the heat shield stud, and press the operating lever beyond the normal stroke. Retighten the flange screws and heat shield stud and then retest the pump on the engine. If the pressure is still too high, disassemble the pump and reassemble it using a lighter main diaphragm spring.



**SOME PARTS MUST BE PROTECTED AGAINST MOISTURE**

NO MOISTURE CAN EVER REACH CONDENSER WINDING

CONNECTOR EMBEDDED IN NEOPRENE

CASE EMBEDDED IN NEOPRENE

**ECHLIN CONDENSERS ARE WATERPROOF AT NO EXTRA COST TO YOU**



# ECHLIN



**CONTACTS  
COILS • CONDENSERS  
& OTHER AUTOMOTIVE  
ELECTRICAL PARTS**

ECHLIN MANUFACTURING COMPANY, Dept. MA, 220 EAST ST., NEW HAVEN 5, CONN.



# 1905 THREE PURPOSE CAR



*In 1905 this odd vehicle was invented. It was a three purpose car, designed to travel on land, water and ice. Hinged paddle wheels, attached to the rear wheels, converted it from land to water. For ice travel, spikes were attached to the rear wheels and a runner was placed under the front wheel.*

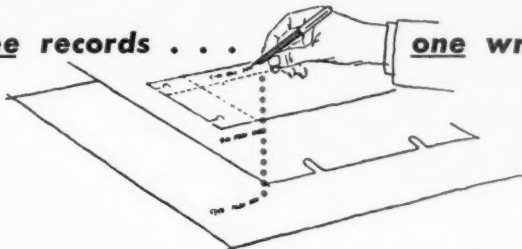
—from Floyd Clymer's Historical Motor Scrapbooks

## NOW...PAYWRITE Cuts Payroll Preparation Costs by giving you three payroll records with one writing!

Paywrite will cut your payroll preparation costs in half and eliminate costly transcribing errors. Two of the three payroll postings are completely eliminated by the simple, easy-to-operate Paywrite system. Without changing the writing position, one posting completes all three forms . . . the Check or Cash Statement, Earnings and History Record, and Payroll Summary. Errors in transcribing figures are eliminated and payrolls can be prepared in half the time . . . or less.

Use the coupon below to get complete information on the time-saving Paywrite system.

**three records . . . one writing!**



. . . one of the several hundred sales aids and operating systems that build and protect your profits, produced by Reynolds & Reynolds



**The REYNOLDS & REYNOLDS Company**

CELINA, OHIO

OFFICES IN PRINCIPAL CITIES

WESTERN BRANCH: 400 W. PICO BLVD., LOS ANGELES



The Reynolds & Reynolds Company  
Celina, Ohio

Please send me information on the Paywrite System.

Name

Firm Name

Address

City  State



## Axe to Grind . . . . . Continued from Page 42

you sell more than what your customers came in to buy. They suggest sales. They remind buyers. They are your silent salesmen but their silence will be booming for business.

Third, the six mailing cards, shown with article are tie-ins with the posters. They are in three colors, each carrying an important

advertising message, each imprinted with your name and addressed to your customer list (or to a list provided by the addressing company, with your okay).

If you are doing no direct mail advertising, here's an opportunity to start. If you have a campaign of your own, this could easily supplement your effort.

*Electrify Service Income*



*with*

**AMERICAN BOSCH**

**GENERATOR REGULATORS**

RGD Type \$700 List  
RGS Type \$750 List



Ask about the new "3 for All" Regulator Kit ... 3 American Bosch Regulators to cover practically all cars. An individual shipping container that converts to an attractive counter display ... at a special, low introductory price. It will make sales for you.

Maintain your reputation for good electrical service with replacement parts you can depend on. The outstanding performance of American Bosch Generator Regulators for all cars has been demonstrated in the millions of these precision units used as original equipment. They feature temperature compensated cut out and voltage regulator units, cadmium plated steel parts to resist corrosion and an extra 14 ohm dampening resistor to absorb field current shock. Voltage regulating contacts consist of one platinum and one tungsten point, a superior combination that assures long life and setting stability. From heavy, vaulted steel cover to terminals, here's the best Voltage Regulator money can buy, yet *priced right* for replacement volume. Ask your Jobber about it.



# American Bosch

MAGNETOS • GENERATORS • VOLTAGE REGULATORS • IGNITION COILS  
ELECTRIC WINDSHIELD WIPERS • DIESEL FUEL INJECTION EQUIPMENT

AMERICAN BOSCH CORPORATION • SPRINGFIELD 7 • MASS.

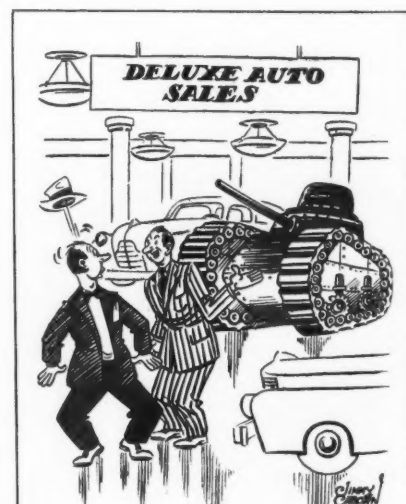
Cost? As this article was written, costs were not available. However, all material is being mass-produced thereby keeping costs at a minimum. Cost has been kept deliberately low, say the Automotive Advertisers Council so that the program will be within the reach of a large majority of automotive retailers.

A very important unit in the program is a plan book and descriptive catalog entitled "This Means Business for All Automotive and Repair Establishments," which contains complete information about the program and the advertising material available to automotive retailers. The entire program is contained in a compact advertising kit which can be procured through the 1300 U. S. and Canadian jobbers who are enrolled in the "Get It From Your Jobber" program, announced by the Automotive Advertisers Council in October, 1949.

The whole program is a non-profit cooperative advertising and sales promotion campaign which has been designed specifically to promote business through normal manufacturer - jobber - retailer-vehicle owner channel of distribution.

The program, endorsed by Motor and Equipment Wholesalers Association, National Standard Parts Association, Automotive Engine Rebuilders Association and other

(Continued on page 108)



"... There was a mistake on the shipment of that new car you ordered. . . ."



"Thanks, boss for the Snap-ons!  
you couldn't have wished me a Merrier Christmas!"



**Snap-on Tools**  
\*Trademark of Snap-on-Tools Corporation

## gifts that give to Both ...the giver and the man who gets them



It's an old, sensible slogan: "Give gifts that keep on giving." Snap-ons add this second thought . . . "gifts that give to BOTH—the giver and the man who gets them."

Yes, everyone profits when Snap-ons fill the Christmas stocking—mechanic, foreman, proprietor and motorist. Because fast service and sound repairs—performed safely with strong, accurately-fitting Snap-on Tools—pay off in lowered shop costs and in business-winning advertising which satisfied customers give you. Another point—when you give Snap-ons you're sure you aren't duplicating tools your mechanics already have. Snap-on men call directly on the mechanic—know what he has, frequently learn what tools his heart is set on. So it's the rule, in remembering anyone with Snap-ons, to hear these pleasant words, "Just the tools I needed!"

Any Snap-on received as a gift may be exchanged. If you prefer, you may secure Gift Certificates, in any denomination, from your Snap-on man.

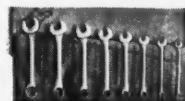
**SNAP-ON TOOLS CORPORATION**  
8030-J 28th AVENUE, KENOSHA, WISCONSIN



## Gifts Your Mechanic Will Like

—selected from hundreds in the Snap-on catalog

**Boxsocket on One End . . . Open End Wrench on the Other End.**



Both ends fit the same size nuts. Short overall handle length 5" to 6-57/64", ideal for close quarters. 15° angle on boxsocket to give knuckle clearance. Open end is at angle—30° turning accomplished by flopping tool. Ask for OEXS-708-K set.



**Here are the 3 Basic Pliers**

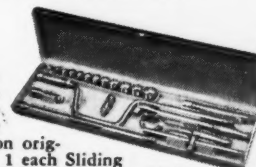
—most often used in everyday work, 7" diagonal cutters, 6" needle nose, 7" combination—all precision tools of great strength. Ask for PL-30-K set.



**Torquemeters tell Bolt Tension**

—told from a dial as easily as a watch tells you the time! Model TQ-150 has a capacity of Zero to 150 ft. lbs. Absolutely essential to uniform tightening so necessary for fine performance.

**Ferrets for the Tight Places**



—and here's a specially popular 21-piece set of these handy, slender tools which Snap-on originated. 13 sockets, 1 each Sliding Bar, Ratchet, Nut Spinner, Speeder, Universal Joint and 3 Extensions. Ask for 221-F-B set.

## Axe to Grind . . . . . Continued from Page 106

industry groups was developed by the Council's Committee on Industry-Wide Advertising under the chairmanship of Walter A. Kirkpatrick, advertising and sales promotion manager of the Wilkening Mfg. Co., Philadelphia. Other members of the committee are: C. C. Tapscott, vice-president of McQuay-Norris Mfg. Co., St. Louis;

Ira Saks, president of the Accurate Parts Mfg. Co., Cleveland; John F. Corkery, advertising manager of Independent Pneumatic Tool Co., Aurora, Ill.; and Duane A. Jones, advertising manager of United Motors Service, Division of General Motors Corp., and president of Automotive Advertisers Council, Detroit.

**NEW 14"**  
**South Bend**  
**Economy Model**

**DRILL PRESS**

**\$76.00**  
f.o.b. factory  
less  
motor and chuck



**RUGGEDLY CONSTRUCTED FOR  
MACHINE SHOP SERVICE**

**Features** include automatic belt tension, direct reading depth stop, full tilting table, rigid one-piece head casting, free-floating six-spline spindle, four pre-lubricated and sealed precision ball bearings, and adjustable quill feed tension.

**Specifications:** Drills to center of 14-1/4" circle, maximum drill size 1/2" in steel, spindle run out .005" or less, spindle square to table within .0075" in 5". Net weight of bench model shown; less motor, wiring and drill chuck is 124 lbs.



**SOUTH BEND LATHE**  
SOUTH BEND 22, INDIANA  
Building Better Tools Since 1906

Write for  
Bulletin 402



The entire automotive service industry was well represented at the presentation of the Industry-Wide Program of advertising for automotive retailers in Chicago. In attendance were many of the officers and directors of M.E.W.A., N.S.P.A., A.E.R.A., and representatives of such outstanding industry groups as National Automotive Parts Association, International Booster Clubs, Automotive Affiliated Representatives, state and local jobber associations, the Piston Ring Manufacturers Group, the Muffler Manufacturers Institute, the Friction Materials Standards Institute, Inc., the Association of American Battery Manufacturers, the Automotive Accessories Manufacturers Association, the Automotive Electric Association, the Automotive Lift Institute, the Chain Institute, the Gasket Manufacturers Group, the Piston and Pin Standardization Group, and the advertising and sales executives of the manufacturers who are members of Automotive Advertisers Council, Inc.

### Graham-Paige

Graham-Paige, once a prominent name in the automobile industry, has lost its last connection with the automobile field. It has changed its name from Graham-Paige Motors Corp. to Graham-Paige Corp. to reflect its change to an investment company.





THE RECOGNIZED AND ACCEPTED LEADER IN THE TRAILER CONNECTOR FIELD

# COLE-HERSEE

PROUDLY INTRODUCES THE  
"FLAP-LOCK" TRAILER CONNECTOR,  
"ATA" STANDARDIZED 7 POINT TRAILER CONNECTOR  
AND NEW "GRIP-PLUGS."

DESIGNED TO EXACT A.T.A. SPECIFICATIONS.

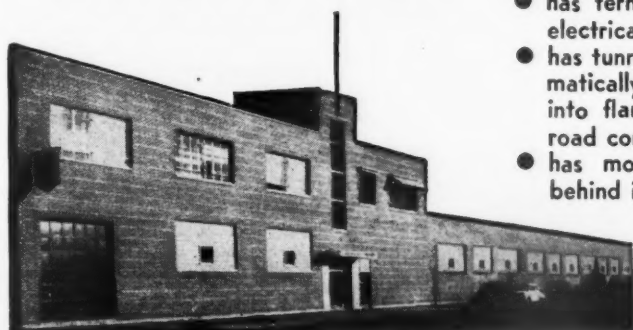
ENGINEERED AND MANUFACTURED BY COLE-HERSEE—

A CONCERN WHICH OCCUPIES AN ENVIABLE POSITION FOR  
QUALITY, RELIABILITY, PERFORMANCE AND SERVICE IN THE  
MANUFACTURE OF ELECTRICAL EQUIPMENT FOR THE MOTOR  
INDUSTRY.



## THIS NEW HEAVY DUTY COLE-HERSEE TRAILER CONNECTOR

- has Locking Flap with automatic release that lets go without damaging flap if trucker fails to uncouple.
- has Collar type Wire Clamp — grips wide range of cable sizes and has the exclusive Cole-Hersee split, tapered knife gripping strain relief.
- has non-destructible and non-corrosive plug.
- has terminals in both plug and socket color coded.
- has terminals made of special bronze alloy for perfect electrical connection — minimizes voltage drop.
- has tunnel shaped guide between cover and socket automatically pre-aligns plug for easy one-handed assembly into flange socket under the most difficult terminal or road conditions.
- has more than 40 years experience and reputation behind it.



YOU CAN RELY ON COLE-HERSEE  
A NAME BUILT ON QUALITY

CONSISTENTLY BETTER PRODUCTS FOR THE AUTOMOTIVE INDUSTRY

# COLE HERSEE CO.

20 OLD COLONY AVE.  
BOSTON 27, MASS.

## New Products Show Window

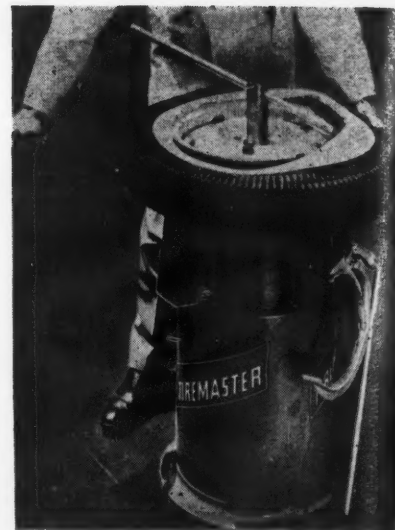
(For further information use coupon on p. 61)

### 403. Anti-Freeze

Speco, Inc., announces an improvement in its alcohol type anti-freeze, Freez-Rem. A new type of rust inhibitor has been added, known as Speconite. It is claimed to prevent rust and corrosion of metals in the engine cooling system and will not damage rubber hose or hose connections.

### 404. Tire Changer

The Salsbury Corp. announces a new model tire changing machine. It incorporates the same basic features as previous models and many new improvements have been developed to reduce service problems to a minimum. This machine has built-in section for all



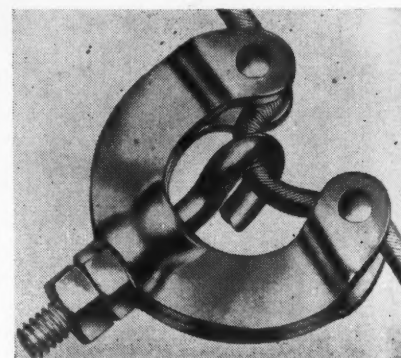
tools and are conveniently mounted on the side of the Tiremaster.

### 405. Door Aligner

Bowman Bros. is manufacturing the Align-A-Door machine, for use in body shops when difficult door straightening jobs are encountered. The machine attaches to the door frame edge (crimped edge) and pushes the door frame back to its original position. The panel is said to follow the frame, and the deep dent is gone. The machine is left in place while the Body Man "spoons" the panel. No underneath dolly or shrinking or inside panel cutting is usually necessary.

### 406. Cable Adjuster

The South Gate Brake Specialties Company is marketing a hook-on cable adjuster with full two inches of take-up. The mechanic



hooks one of these units over the cable, tightens the lock nuts, and the cable is tightened. The adjuster handles up to 1/4 in. cable and weighs 2 ounces.

(Continued on page 112)



Pennzoil backs you up all the way. It gives your customers performance—quick-starting, smooth-running engines. It gives them protection—safeguards against sludge, varnish, corrosion. Best of all, it lasts longer, grade for grade. Made from the finest 100% Pennsylvania crude with unmatched solvent-refining and dewaxing. Powerfully advertised... fast selling... worth investigating!

★

**THE PENNZOIL COMPANY**

Executive Offices

Oil City, Pa. • Los Angeles 15, California





# WINNING COMBINATIONS

## YOU and UNITED MOTORS LINES

A winning combination in the automotive service field implies good lines and good teamwork. On the material side, United Motors supplies parts and products that are original equipment on the country's leading makes of cars, trucks and buses. In the matter of teamwork or cooperation, United Motors offers sound merchandising support and accurate up-to-the-minute service and parts data on old-model as well as current-model vehicles. United Motors lines are one unit of a winning combination . . . if you wish to be the other unit, talk with your United Motors distributor, or write direct.

### UNITED MOTORS SERVICE

Division of General Motors Corporation  
General Motors Building, Detroit 2, Michigan

DELCO Batteries  
AC Gauges, Speedometers  
and Rebuilt Fuel Pumps  
SAGINAW Jacks  
MORAINE Engine Bearings  
DELCO Radio Parts  
HYATT Roller Bearings

INLITE Brake Lining  
HARRISON Heaters  
GUIDE Lamps  
DELCO Clocks  
NEW DEPARTURE  
Ball Bearings  
DELCO Shock Absorbers  
MORAINE Gasoline Filters

HARRISON Thermostats  
DELCO-REMY Starting,  
Lighting and Ignition  
KLAXON Horns  
HARRISON Radiators  
ROCHESTER Carburetors  
DELCO Hydraulic Brakes





## New Products Show Window

(For further information use coupon on p. 61)

### 407. Business Records

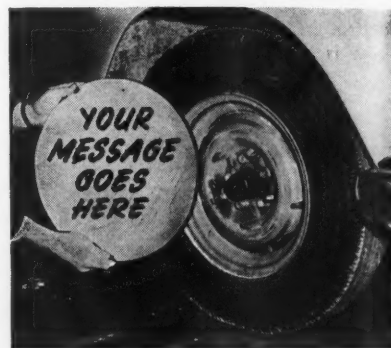
The Management Controls Division of Remington Rand Inc. is publishing an 80-page catalog offering suggestions on efficient maintenance of business records and effective administrative control over all phases of business management. The booklet, which is a comprehensive presentation on

all phases of the Kardex Visible Control principle, describes the various combinations of record forms which may be incorporated in Kardex "pockets" and the variety of colored signal control methods which may be used on the visible margin of the records. Five types of visible cabinets are illustrated, including the new

mechanized unit, Robot-Kardex, with complete specifications on all sizes available.

### 408. Wheel Signs

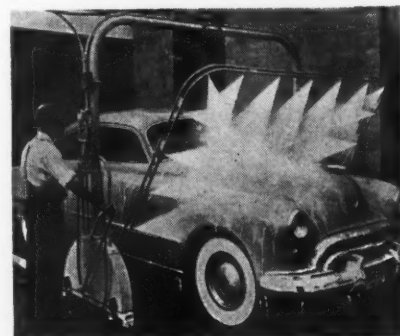
Van Houten, Inc., has developed a new medium of carrying advertiser's sales stories to the public. The device, known as the Adver-Disc, is an all metal disc which fastens to the front wheels of



passenger cars, commercial cars or trucks, and remains horizontal and motionless while the wheels revolve. The discs are available either already printed or in blanks, whichever is desirable.

### 409. Car Washer

Jetomatic, Inc., announces a completely automatic car-washer which features a turbine-type pump, providing the pressure for for soap and water. Called the Jetomatic, this washer traverses on two 22-ft tracks. When the switch is turned on, the machine automatically passes over the car, first spraying it with water, then with soap, and finally clear rinsing it under pressure. Since the



pump puts the water under pressure after it has entered the machine, it is said to be possible to operate it from a well, or even a barrel of water. No air pressure is required.

## THE ONLY AUTOMATIC OIL-LEVEL SIGNAL



### THE POSITIVE DASHBOARD INDICATOR THAT ACCURATELY MEASURES OIL-LEVELS BY WEIGHT

Now approved by leading car manufacturers after exhaustive laboratory and proving ground tests. OIL-CUE (formerly OIL-SPY) is the newest, most recent of all dashboard instruments to automatically signal the driver when oil-levels drop dangerously low.

Selected only after years of careful application of fundamental laws of hydrostatics and electronics, OIL-CUE is the answer to the motorists' demand for a convenient, accurate instrument to insure oil-level safety.

Mounted on the dashboard in

full view of the driver, the AMBER light immediately appears when the motor oil-level drops one quart. If this caution is ignored too long and the oil-level drops two quarts, a RED light glows a final warning to prevent costly engine damage. The lights remain on as a constant reminder to add necessary oil as long as the ignition is turned on.

OIL-CUE offers new positive protection against such damage resulting from oil leaks, broken lines, excessive consumption and careless service and checkir g.

#### SCIENTIFICALLY DESIGNED

OIL-CUE consists of the special drain plug, a weather-proof cable to transmit the oil-level impulse to the handsome dashboard instrument and a short lead wire to the ignition switch to provide necessary current.

"THE LIGHT IS A CUE THAT OIL IS DUE"

QUICKLY-EASILY  
INSTALLED—



Write for complete information

PARKWOOD MFG. CO.  
CLEVELAND, OHIO

Exclusive Representatives  
FRANK A. NEALON ASSOCIATES

2111 WOODWARD AVENUE, DETROIT 1, MICHIGAN

Exclusive Representatives  
GARBISSCH-EDGINGTON, INC.

MODELS FOR CARS, TRUCKS, BUSES, TRACTORS AND AUTOMATIC TRANSMISSIONS

# PHOSALLOY—

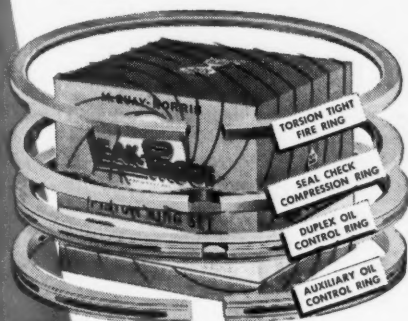
*The finest of all*  
**PISTON RING METALS!**

made by McQUAY-NORRIS for

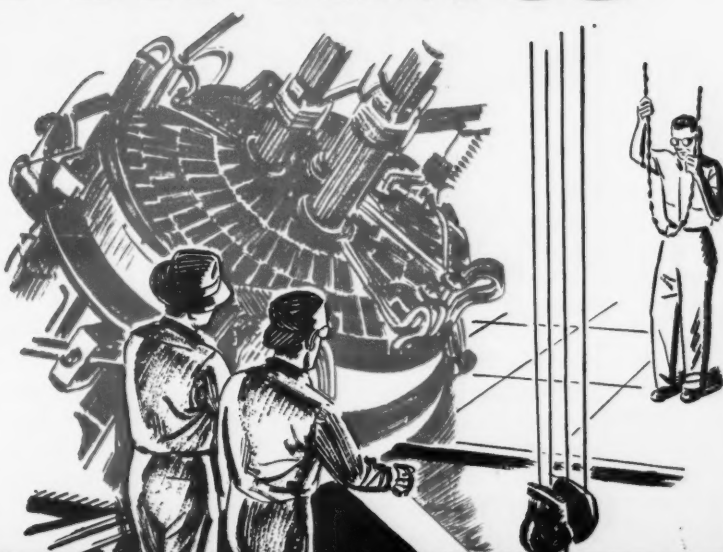
# LEAK-PROOF

REG. U.S. PAT. OFF.

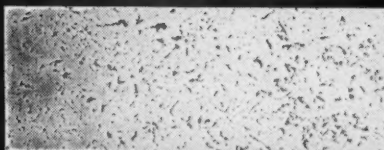
# PISTON RINGS



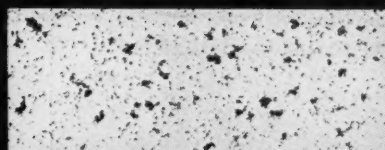
Modern design, finer workmanship and Phosalloy make LEAK-PROOF Piston Rings better. Eliminate come-backs, install only LEAK-PROOF Piston Rings and get the job done right. They're guaranteed, and they're priced right for profit.



PHOSALLOY—the finest piston ring material available is produced only in an electric furnace. It contains a high percentage of phosphorus, which is one of the best heat resisting metals known. This iron can be produced only in an electric furnace, where the temperature and ingredients in the mix can be kept constant.



Microphotograph of a section of Phosalloy, showing the finely divided graphite.



Microphotograph of ordinary piston ring iron, showing the large sections of graphite in long flakes.

McQUAY-NORRIS MANUFACTURING CO. • ST. LOUIS 10, MO.

STILL ANOTHER REASON WHY GUARANTEED **LEAK-PROOF** PISTON RINGS ARE BETTER

Continued from Page 36

## PEEDEE says... "TOPNOTCH TUNE-UP JOBS

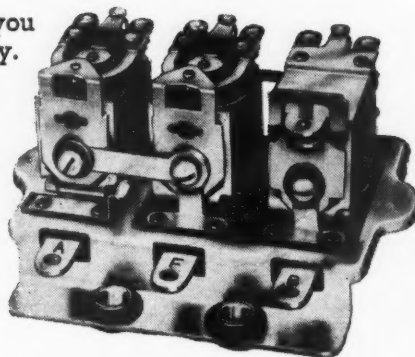
### always go with this Trademark!"



● You are always sure of customer satisfaction when you use genuine P&D products. That's because they are manufactured entirely in our modern plant from raw materials to finished products to assure long, dependable service.

The P&D voltage regulator is typical of the expert automotive engineering, finest materials, and skilled workmanship that go into all P&D parts. See the large size insulated copper magnet wire that gives the windings maximum electrical stability. Next, notice the insulation. It's made of the best laminated phenolic plate available. And the contact points are the integral type . . . built to resist pitting. The riveting shank and contact proper are especially designed to provide minimum and unvarying electrical resistance between contact and mounting.

Yes sir — P&D parts are the best you can handle to keep customers happy. Write today for your free copy of the new Catalog No. 49 giving full information on P&D brushes, bushings, cut-outs, distributor products, etc. — the one complete line of electrical parts for all vehicles.



Turn Out Better

Tune-up Jobs

With Pee Dee

**P&D**

MANUFACTURING COMPANY, INC.

LONG ISLAND CITY 5, N. Y.

North Carolina Automobile Dealers Association.

A topnotch speakers' program is being arranged, according to Lloyd. A definite commitment already has been made by Dr. Norman Vincent Peale, prominent religious leader, veteran radio commentator, author and editor, who is pastor of Marble Collegiate Church, New York City, oldest Protestant church in America.

A nationally known industrialist and a prominent government official also will be on the speakers' program, Lloyd said.

A Convention Entertainment Committee, headed by Russell N. Lentz, N. A. D. A. director for South Carolina, is making plans for a water ski show on Indian Creek, Miami Beach, a cabaret party and fashion show at Dinner Key Auditorium, and many other special features.

Under present plans, the Equipment Exposition held in conjunction with the convention, will be staged in circus tents adjoining the convention auditorium. Chairman of the Exposition Committee is W. S. Edwards, Jr., N. A. D. A. director for Alabama and regional vice president. Members of his committee include B. H. King, Jr., Orlando, Florida; Charles B. Tutan, Miami, Florida; I. C. Pendarvis, Tampa, Florida; and Walter C. Mallory, general manager of the Florida Automobile Dealers Association.

Lloyd said he expects the greatest attendance in the history of the N. A. D. A.





Say "Merry Christmas" with  
**Howard Zink**  
**SEAT COVERS**

**Howard Zink**  
**SEAT**

Gift Certificate is featured in consumer advertisement appearing in early December.

*Gift Certificate*  
for one set of  
**HOWARD ZINK SEAT COVERS**  
with the best wishes of

DATE \_\_\_\_\_ NO. \_\_\_\_\_

*Gift Certificate*  
for one set of  
**HOWARD ZINK SEAT COVERS**  
with the best wishes of \_\_\_\_\_

Redeemable at \_\_\_\_\_

Name of Dealer \_\_\_\_\_

Address \_\_\_\_\_

Style of Covers Selected \_\_\_\_\_

Authorized signature for dealer \_\_\_\_\_

*Customers will buy*  
**Howard Zink**

**SEAT COVERS**

*... for Christmas Gifts*

as advertised in



and



During November and early December The Saturday Evening Post and Holiday will carry full color advertisements promoting the use of Howard Zink Seat Covers as Christmas Gifts. Each will describe the Gift Certificates which permit the recipients to choose their own covers. Get your supply of Howard Zink Gift Certificates and feature them in your local advertising.

Gift Certificate is illustrated and described in consumer advertisement for November.

P. S. Be sure to order an adequate stock of Howard Zink Seat Covers. You'll need them!

**PLASTIC FABRICS**  
Beautiful colors in both bold and neat patterns are available in woven saran plastic fabric.

**RAYON CLOTHS**  
Their lustrous satin-like beauty is offered in three most wanted solid colors: maroon, blue and green.

**PLASTIC COATED FIBRE FABRICS**  
Smooth, dirt-resisting, easily cleaned fabrics in colorful patterns.

**Howard Zink**

**THE HOWARD ZINK CORPORATION**

FREMONT, OHIO

Passaic, N. J. • Long Beach, Calif. • Charleston, Miss.

*World's largest manufacturer of auto seat covers*

*Catch your limit  
in cable profits  
with*

# PACKARD BATTERY CABLES

Battery cable profits won't "get away" from you when you handle Packard battery cable. For the quality is there . . . Packard cables are full size, full weight, and deliver a full measure of value. What's more, you have a choice of LeadAlloy terminal or Leaded Brass terminal . . . fast cranking, quick starting, and maximum battery life are assured. You'll catch your limit in battery cable sales with Packard cable!

*Packard*  
REG. U.S. PAT. OFF.  
TRADE MARK

Packard Electric Division, General Motors Corporation  
Warren, Ohio



## PACKARD BATTERY CABLE IS BEST BECAUSE . . .

Full gauge copper conductor . . . insures delivery of adequate power for quick starting.

Insulation of conductor is accomplished by a heavy sheath of special rubber compound, strong braid and lacquer.

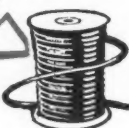
Cadmium-plated "Korelug" attached by 50-ton press is integral part of conductor.

Raised bosses or shoulders for easy spreading of terminal.

Terminals, bolts and thick nuts are all given a special Packard corrosion resistant treatment.

Trade numbers deeply and clearly stamped into Korelug for positive identification.

Reference chart printed on bottom panel of container . . . trade number printed on end panel for quick identification.

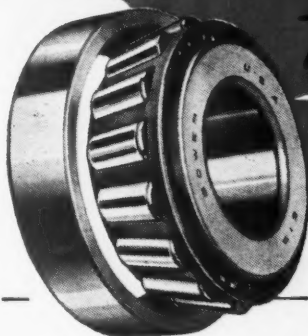


**FOREMOST BUILDER OF AUTOMOTIVE AND AVIATION WIRING**

*The Complete Line*

*The Quality Line*

BOWER



ROLLER BEARINGS

*For Every  
Automotive  
Service  
Need!*

*Ask Your*



*Jobber!*

Yes, your Federal-Mogul jobber is now your service source for famous Bower *Spher-O-Honed* Roller Bearings for car, truck, bus, tractor and trailer replacement use.

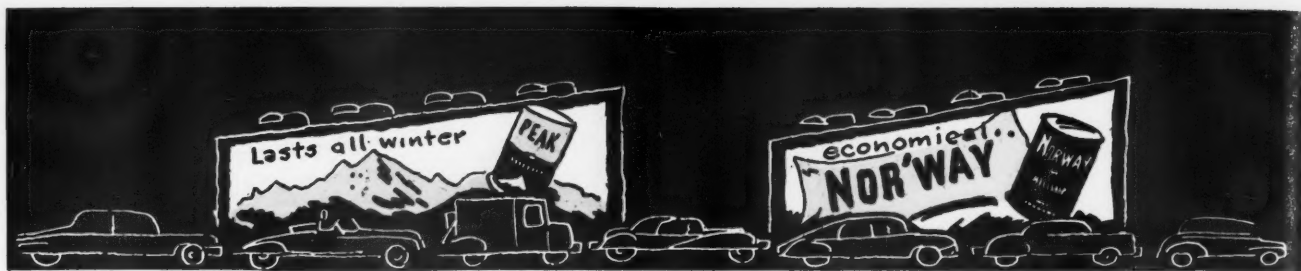
The Bower line provides complete coverage of tapered roller bearing applications, and includes popular numbers in straight roller bearings.

**FEDERAL-MOGUL SERVICE**

(Division of Federal-Mogul Corporation)

**Detroit 13, Michigan**





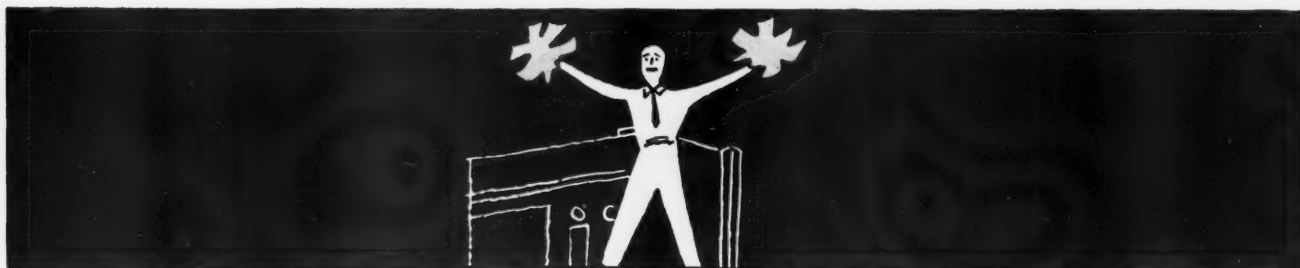
*along the road our billboards sprout . . . their goal in life's to help you out!*



*while those who miss the outdoor scenes read our ads in magazines!*



*all this support from CSC's*



*to help you sell more anti-freeze!*

With window banners and post cards  
Our sales kits really sell!  
We send one free with every order  
To help you ring the bell!

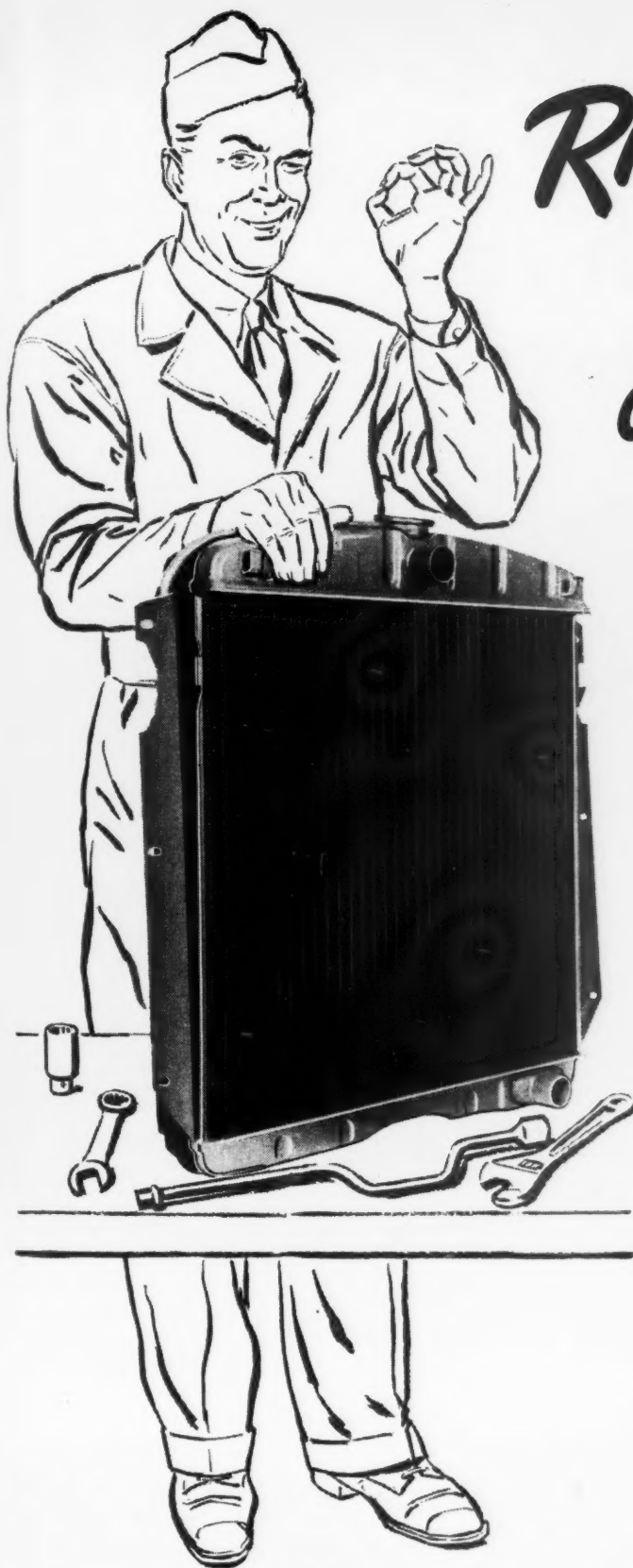
PEAK® (PERMANENT) ANTI-FREEZE (\$3.50 gal.)  
and NORWAY® (ECONOMY) ANTI-FREEZE (\$1.25 gal.)  
nationally advertised in  
magazines, newspapers,  
and on billboards.



**COMMERCIAL SOLVENTS CORPORATION**  
Specialties Division

17 East 42nd Street, New York 17, N. Y.





*Right...  
for replacement  
on all cars -*

## HARRISON RADIATORS

The Harrison radiator line represents one of the biggest opportunities in automotive service!

Harrison radiators are original equipment on all GM cars. Chevrolet, Pontiac, Oldsmobile, Buick, Cadillac . . . all have Harrison radiators as original equipment . . . all offer *you* a tremendous pre-sold replacement market. Then, too, Harrison cores meet the replacement requirements of *all* cars and most trucks.

Don't miss this opportunity for profits in the automotive cooling part of your business! The Harrison radiator line meets a large and continuous demand . . . serves a large and profitable market.

Twenty United Motors branch warehouses, spread throughout the country, serve United Motors Distributors everywhere . . . assure you of speedy delivery.

For complete information, call your nearest United Motors Distributor, or write direct: United Motors Service, General Motors Building, Detroit 2, Michigan.



**HARRISON RADIATORS—A UNITED MOTORS LINE**  
Available Everywhere Through  
**UNITED MOTORS DISTRIBUTORS**

# HARRISON

**HARRISON RADIATOR DIVISION**  
GENERAL MOTORS CORPORATION, LOCKPORT, NEW YORK

# \$3500.00

SPONSORED BY

# WESTINGHOUSE AUTO BULBS

## 1st PRIZE \$1000.00 CASH



You can win this in a walk. All of us service guys have more safety angles than Hollywood has curves. It'll be easy. Read the easy rules below.

## 2nd PRIZE \$500.00 CASH



This is a breeze. You've been thinking about safety for 25 years? Good! Just say it in 25 words and you're in. Enter as many times as you wish.

NEXT 10 PRIZES \$100.00 CASH EACH

NEXT 100 PRIZES A CRISP \$10 BILL

If you work in a service station, auto supply store, garage, or any place that sells auto products to the general public, you'll want to enter this easy contest. Just tell us which are the most important safety checks to make on a car and give your reasons. Be sure to follow the simple rules listed below. Maybe you will be the big \$1000 winner!

**112 FINE PRIZES — Easy to Enter! Easy to Win! Enter Early...Enter Often**

1. Tear off the top of a carton which holds a Westinghouse Sealed Beam Lamp. See the carton picture below.

2. On the back of this carton top, write down what you think are the *most important items* to check for safety on a car (don't list more than five). Then finish the following sentence in 25 additional words or less: "I chose these because (now fill in your own 25 words or less)"

*Here's an example: Tires, brakes, head lamps, battery, windshield wipers. I chose these because: You can't take a chance on overlooking any one of them. To avoid accidents they have to be in tip-top shape constantly.*

3. Write or print plainly on the carton top. (Use plain paper if you wish, but be sure to send a carton top with your entry.) Enclose in an envelope. Entries must be the original work of the contestant and will be judged on the basis of sincerity, sensible reasons, and originality.

4. Be sure to include your name and address

and the name and address of the place you work.

5. Mail to Westinghouse Safety Contest  
Box 1313, Grand Central Station  
New York 17, N. Y.

*One 3¢ stamp should be sufficient. Entries must be postmarked not later than midnight, December 16, 1950. Submit as many separate entries as you wish but each entry must be on a carton top or accompanied by a carton top. Decision of the judges is final. Duplicate prizes in case of ties. Only one prize per contestant. No entries will be returned.*

6. The contest is open to anyone in the continental United States who is engaged in selling automotive products to the general public. *Any number of employees working in the same establishment may enter.* The contest is subject to all State and Federal regulations.

7. The winners' names will be announced approximately four weeks after contest closes.

THIS IS  
YOUR ENTRY





# SAFETY CONTEST

## Why Westinghouse bulbs are the bulbs you should sell . . .

In your business you're selling safety. That's why you carry wiper blades, fan belts, cables, and light bulbs. That's why you check for worn tires, bad brakes, loose connections, and burned-out lamps.

Isn't it logical, then, that you should handle the lamps that can be depended upon to give maximum See-ability on the road? Lamps that are the best that money can buy. Westinghouse lamps!

**A WESTINGHOUSE SEALED BEAM LAMP IS A PRECISE OPTICAL SYSTEM.**

The lens has 121 little prisms to direct every bit of the light to the right spot.

The whole unit is all glass and heat toughened during manufacture so that it resists shocks, flying stones, and jars and jolts.

Reflector can't be distorted by pressure from the holding clamps. Nor will it ever tarnish or blacken, because it is hermetically sealed.

The filaments are accurately positioned and they stay in line.

When you're selling a headlight lamp, sell a Westinghouse Sealed Beam lamp. It's the lamp you know will give customer satisfaction.

YOU CAN BE SURE...IF IT'S **Westinghouse**

**Delco  
Brake Fluids  
Exceed  
S.A.E.  
Specifications**



Delco Super 9 and Delco Super 11 exceed their respective SAE brake fluid specifications—the accepted standards of quality and safety in the automotive industry.

Delco brake fluids contribute to better braking performance . . . to greater safety on the highways. Assure your customers of an extra margin of safety with Delco Super 9 or Delco Super 11.



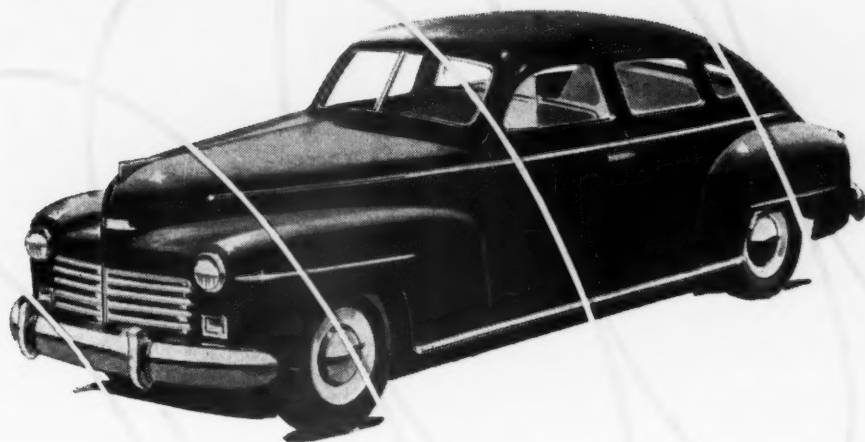
**DELCO BRAKE—A UNITED MOTORS LINE**  
Available Everywhere Through  
**UNITED MOTORS DISTRIBUTORS**

**Delco**

**SUPER 9 AND SUPER 11 BRAKE FLUID • DECLINE • BRAKE PARTS  
STANDARD FOR EQUIPMENT • THE STANDARD FOR REPLACEMENT**

**MORaine PRODUCTS DIVISION OF GENERAL MOTORS**

# 175° all over



## in the DeVilbiss Convection Oven



Write for bulletins  
DI-113, DI-B-110,  
DI-B-102 describ-  
ing the DeVilbiss  
Auto Oven, Show-  
room Spray Booth,  
and DeVilbiss  
Spray Painting  
Equipment.

Hood, door panels, top deck, window reveals, door jambs and turned-under surfaces along fenders and lower portions of the car body reach a *uniform* temperature for *uniform* hardening in the DeVilbiss Oven. There are no "burned-up" areas to discolor paint—no undried spots to pick up lint and dust. Your profits are spared the losses from costly rework operations. Your customer gets a paint job that is sure to give best satisfaction and service.

The DeVilbiss Auto Oven is unmatched for low-cost drying . . . as little as a dime's worth of gas can dry a fresh-sprayed car. Filtered warm air, maintained at the ideal temperature by simple, safe controls, is gently circulated over and around the entire car. And often within an hour after painting a car it is possible for the customer to pick it up.

For the perfect auto refinishing job, spray cars with DeVilbiss Guns and Equipment in the bright, filtered-air DeVilbiss Showroom Spray Booth . . . then roll the car into the DeVilbiss Auto Oven for uniform, dust-free drying while you paint the next car.

**THE DEVILBISS COMPANY**

Canadian Plant: WINDSOR, ONTARIO

**Toledo 1, Ohio**

# DEVILBISS

*means Quality in all four . .*



**SPRAY EQUIPMENT  
EXHAUST SYSTEMS  
AIR COMPRESSORS  
HOSE & CONNECTIONS**





# Cash registers ...as AUTO-LITE

**From DETROIT:** "Glad we've got your big Auto-Lite Spark Plug promotion campaign backing us up. We're doing better than we've ever done before, and we're giving Auto-Lite all the credit."

FRAN KELLY  
Kelly Automotive Service  
Detroit, Michigan

**From ATLANTA:** "We think your Fall Auto-Lite Spark Plug Program is one of the best ever devised. It's helped our business by increasing sales of Auto-Lite Spark Plugs as well as service."

PRIOR TIRE COMPANY  
458 Peachtree St., N.E.  
Atlanta, Georgia

**From TOLEDO:** "Even customers are asking us to check their spark plugs when they leave their cars for service. It's boosted our sales of Auto-Lite Spark Plugs to new record highs."

C. A. SHAAD  
Shaad Auto Electric  
Toledo, Ohio

**From NEW YORK:** "Glad I signed up. Your Auto-Lite Spark Plug sign is working wonders for me . . . new customers are coming to me for service."

FREDERICK HAUG  
Haug Automotive Service  
New York, New York

**From DALLAS:** "Your Auto-Lite Spark Plug Fall Program is one of the finest we have ever seen. It's working for us all right."

WALTER S. CLIFTON  
Walter S. Clifton Garage  
Dallas, Texas

**From OAKLAND:** "We are selling more Auto-Lite Spark Plugs . . . more of everything in fact as a result of your Auto-Lite Spark Plug campaign on radio and television. We are all for it, and wish others would follow the lead established by Auto-Lite."

RUDY E. PAVLIK  
Pavlik Automotive Service  
Oakland, California

**From PHILADELPHIA:** "Check spark plugs too . . . has become a password here with my men and we are selling more Auto-Lite Spark Plugs, anti-freeze, and service than we ever have before. Auto-Lite tops the field in our opinion."

M. LIESNER  
L.D.T. Corporation  
Philadelphia, Pennsylvania

**From KANSAS CITY:** "We're really tied-in with your Auto-Lite Spark Plug Promotion this Fall and it's paying off in profits. Our Auto-Lite Spark Plug sign is attracting new customers so we know your advertising really works."

JERRY'S AUTOMOTIVE SERVICE  
3535 Prospect Ave.  
Kansas City, Missouri

**From PORTLAND:** "I raised my sights when I raised your Auto-Lite Spark Plug sign—business was never better. Let's have more of the same."

R. R. MATTHEWS  
Matthews Automotive Service  
Portland, Oregon

# Another *FIRST* only **AUTO**

# SPRING like never before

## boosts your sales into high



**on TV...**

Top-rated "Suspense!" Show in 25 major cities tells your customers and prospects to see their neighborhood Auto-Lite Spark Plug Dealers for fall and winter service. Boosts sales . . . boosts profits!

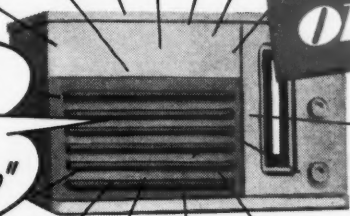
**on Radio...**

"Suspense!" aired over 173 CBS network stations blankets car, truck and tractor owners in your neighborhood. Tells 'em to look for their friendly Auto-Lite Spark Plug

Dealer for spark plug and motor tune-up service. Means new customers . . . more profits . . . more sales.

Plus consistent and powerful magazine, newspaper and farm publication advertising every month to help sell more Ignition Engineered Auto-Lite Spark Plugs the year around.

**"WINTERIZE NOW... Check Spark Plugs, too"**



Display ties in with YOUR Program

### FREE PROMOTION MATERIAL

**Famous Wrapper Plan brings New Premiums to Dealers**—This display kit is a new idea because it is all built to tie-in with major line promotion. Window posters, newspaper mats, radio spot announcements, direct mail pieces, colorful folders. And a new Wrapper Plan lets spark plug sales bring you new and valuable premiums. Books, Jewelry, Household Articles. Win premiums! Build business! Add profits! Get details from your Auto-Lite Spark Plug Jobber now or write to

THE ELECTRIC AUTO-LITE COMPANY  
Merchandising Division  
Toledo 1, Ohio      Toronto, Ontario



Auto-Lite Spark Plugs—  
Patented U.S.A.



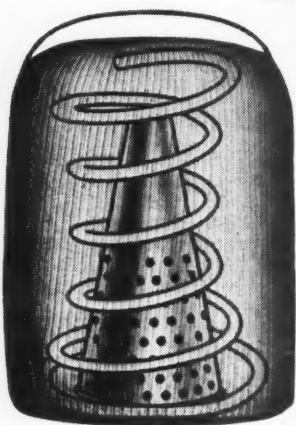
*gives you!*

\* **The Best Advertised Name in the Automotive After-Market!**

# WALKER

NOW YOU CAN GET **WALKER**

Genuine **DELUXE**\* CARTRIDGES



### FOR YOUR DELUXE OIL FILTERS

For top performance in DeLuxe Oil Filters always use genuine DeLuxe Cartridges—for only genuine DeLuxe Cartridges have the patented *cone and spring* which prevent cartridge collapse and assure correct direction and rate of flow for complete oil cleansing.

Genuine DeLuxe Cartridges (made under DeLuxe patent No. 2,168,124) are now available in the Walker Oil Filter line in the four basic sizes: JC, CU, SD and DF.

Don't accept substitutes. Year after year the great majority of Maintenance Awards Winners use Genuine DeLuxe Cartridges. Year after year, nationally-known truck and industrial engine builders recommend and use DeLuxe Cartridges.

*\*DeLuxe Products Corporation is a Division of the Walker Manufacturing Company of Wisconsin*

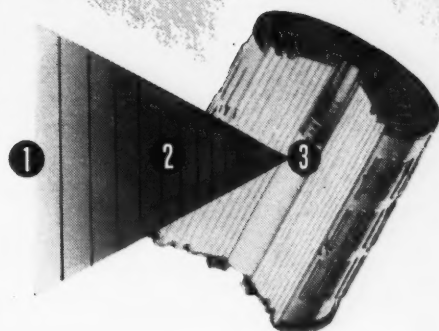


# WALKER



# "3-Dimension" Filtration STOPS "DANGER DIRT" TO $\frac{2}{10}$ OF ONE MICRON!

Keeps Oil Cleaner *between* Oil Changes



Here's proof of how thoroughly Walker Oil Filters remove dust, dirt, metal particles and other engine-made abrasives from the oil stream . . . proof that Walker keeps oil cleaner in the critical period between oil changes.

Walker "3-Dimension" Filtration actually removes abrasives as small as  $\frac{2}{10}$  of one micron—gives engines a 25-to-1 safety factor over the danger size of contaminants.

Only Walker has "3-Dimension" Filtration because Walker alone has the patented *Laminar* construction. It can't channel . . . it won't by-

pass. It combines into *one* cartridge the three basic essentials of good filtration—surface, depth and progressive—multiple filtration to take out the many, different kinds of oil contamination, including moisture.

Certainly you should sell your customers a periodic oil change to protect against oil oxidation, dilution and deterioration. But, *equally important*, install a new Walker Oil Filter Cartridge to keep the oil clean between changes—to give them the added protection, the greater security of Walker "3-Dimension" Filtration.

**WALKER MANUFACTURING COMPANY OF WISCONSIN • RACINE, WISCONSIN**

*Oil Filters • Exhaust Silencers • Jacks • Lifts*

# OIL FILTERS

WITH PATENTED  
*Laminar* \*  
CONSTRUCTION  
\*TRADE MARK



## THE **NEW** ANCO WIPER MOTOR

**Delights Your Customer—  
or Factory Pays Your Money Back**  
(Distributor Keeps His Profit)

Order from your ANCO Distributor one ANCO Kovers-All Motor Service Set-Up... includes 4 ANCO Universal Replacement Vacuum Windshield Wiper Motors—1 each of 4 models for only \$19.98—equal in service coverage to 144 models of original equipment motors.

Sell and install any one of these 4 Motors. If your customer, after using it, is willing to part with it, take it off his car, send all 4 Motors to factory and factory refunds to you (plus your postage) every cent you paid your distributor

for them. Distributor keeps his profit.

Remember... the new ANCO Windshield Wiper Motors are engineered for universal vacuum replacements and are easy to install.

● **Lots More Power**

● **Lots Less Stall**

● **Adjustable Blade Travel**

● **No Blade Slap**

Each ANCO MOTOR is BONDED to please the purchaser as long as he keeps the car.

### THE ANDERSON COMPANY

GARY, INDIANA

Makers of Accepted Automotive Products Since 1918

ANCO PATENTED  
SAFETY PRODUCTS

PATENTS MAKE JOBS

QUALITY PROTECTED  
UNDER

FAIR-TRADE LAWS

play safe...with gaskets that

Match Original Equipment in...

**FIT!**

**QUALITY!**

**MATERIALS!**

**COPPER**

**STEEL**

**BLACK**

Little Drip Says  
"I'm never  
Safe when  
Fel-Pro's around"

PLAY SAFE—SEE your Fel-Pro Jobber for  
ALL your Gasket needs—see him TODAY!

## guard your Profits and Reputation with FEL-PRO'S COMPLETE Gasket Line!

Assure customer satisfaction and full profits by regasketing with gaskets built to equal or excel original equipment! With Fel-Pro, you have a single, dependable source for ALL of your gasket needs. You have the advantage of dealing with a manufacturer that serves the nation's leading car factories with original equipment gaskets—a manufacturer who makes ALL his own gaskets in his own plant! That means you can depend upon *uniformity* in quality, in materials and workmanship. You can be sure that ALL Fel-Pro Gaskets are famous for FIT... famous for LONG LIFE... famous for CUSTOMER SATISFACTION and FULL PROFITS!

# FEL-PRO

Famous For



**FELT PRODUCTS MFG. CO.**

1521 CARROLL AVENUE, CHICAGO 7, ILLINOIS

RS247

FAST SERVICE ASSURED by Warehouses Near You... ATLANTA • BOSTON • NEW YORK • LOS ANGELES • OAKLAND • PORTLAND



# *Exide has EVERYTHING*

- ✓ The GREAT NEW EXIDE BATTERIES that motorists want to buy.
- ✓ Powerful NATIONAL ADVERTISING support.
- ✓ SELLING AIDS that assure quick, easy, profitable battery sales.
- ✓ EXIDE SURE-START SERVICE.
- ✓ Battery SERVICE EQUIPMENT that's economical and easy to use.

WITH EXIDE —  
YOU WILL HAVE EVERYTHING —  
SEE THE EXIDE DISTRIBUTOR

THE ELECTRIC STORAGE BATTERY COMPANY  
Philadelphia 32

*Exide Batteries of Canada, Limited, Toronto*  
"Exide" Reg. Trade-mark U.S. Pat. Off.



WHEN IT'S AN **Exide** YOU START

**Independent Servicemen: Count on Quality Parts for Quantity Sales**

# USE GENUINE CHEVROLET PARTS!

It's money down the drain to have even one dissatisfied customer. It pays to get fine parts—genuine Chevrolet parts. The use of Chevrolet parts, precision-engineered for uniform quality and lasting efficiency, will help promote you as a top-flight service establishment.



Let Your Local  
**CHEVROLET DEALER**  
Serve You!

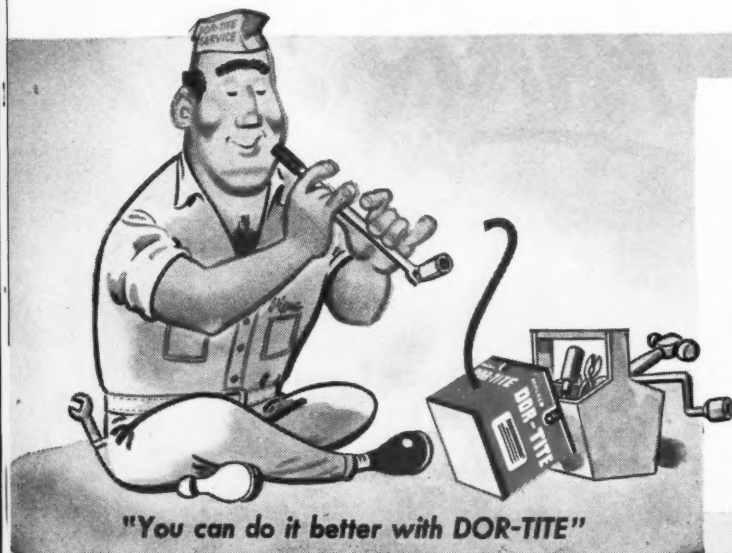


Your local Chevrolet dealer stands ready, willing and able to help you solve your parts and service problems. He can help you give your customers faster, more efficient service when you draw on his large and balanced stock of parts.

FOR YOUR BEST DEAL...  
**DEAL WITH YOUR CHEVROLET DEALER**  
YOUR PARTNER IN SERVICE



# It's the profitable... ...MOLDED DOR-TITE



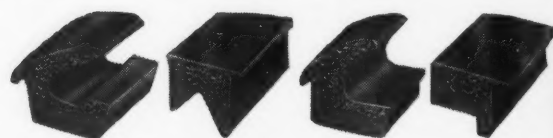
## IT WORKS LIKE MAGIC!

Now—Durkee-Atwood brings you the matchless quality of Molded Dor-Tite that duplicates original equipment, *plus* the exclusive new dispenser package that makes handling and application easier. It can't roll away or foul up—the Molded Dor-Tite dispenser feeds out the material smoothly and positively as you need it. This handy dispenser keeps Molded Dor-Tite absolutely clean, factory fresh, ready for instant use!



## QUICK AND EASY INSTALLATION

Molded Dor-Tite is a cinch to install. The handy dispenser makes every job easier, speeds application. The factory-applied adhesive on the door types or D-A Liquid Adhesive applied to the trunk types never deteriorates, provides just the right tack. To control stretch, Molded Dor-Tite is made with an imbedded cord that assures smooth, wrinkle-free application. It lines up and stays lined up!



## TYPES TO FIT MOST CARS AND COMMERCIAL VEHICLES

Durkee-Atwood Molded Dor-Tite is made in types for door applications and trunk applications. Each type is packed in shop-size lengths in the new and exclusive dispenser developed for your convenience by Durkee-Atwood.

## PUSH SALES OF STANDARD DOR-TITE FOR ALL-PURPOSE SPONGE RUBBER GASKET

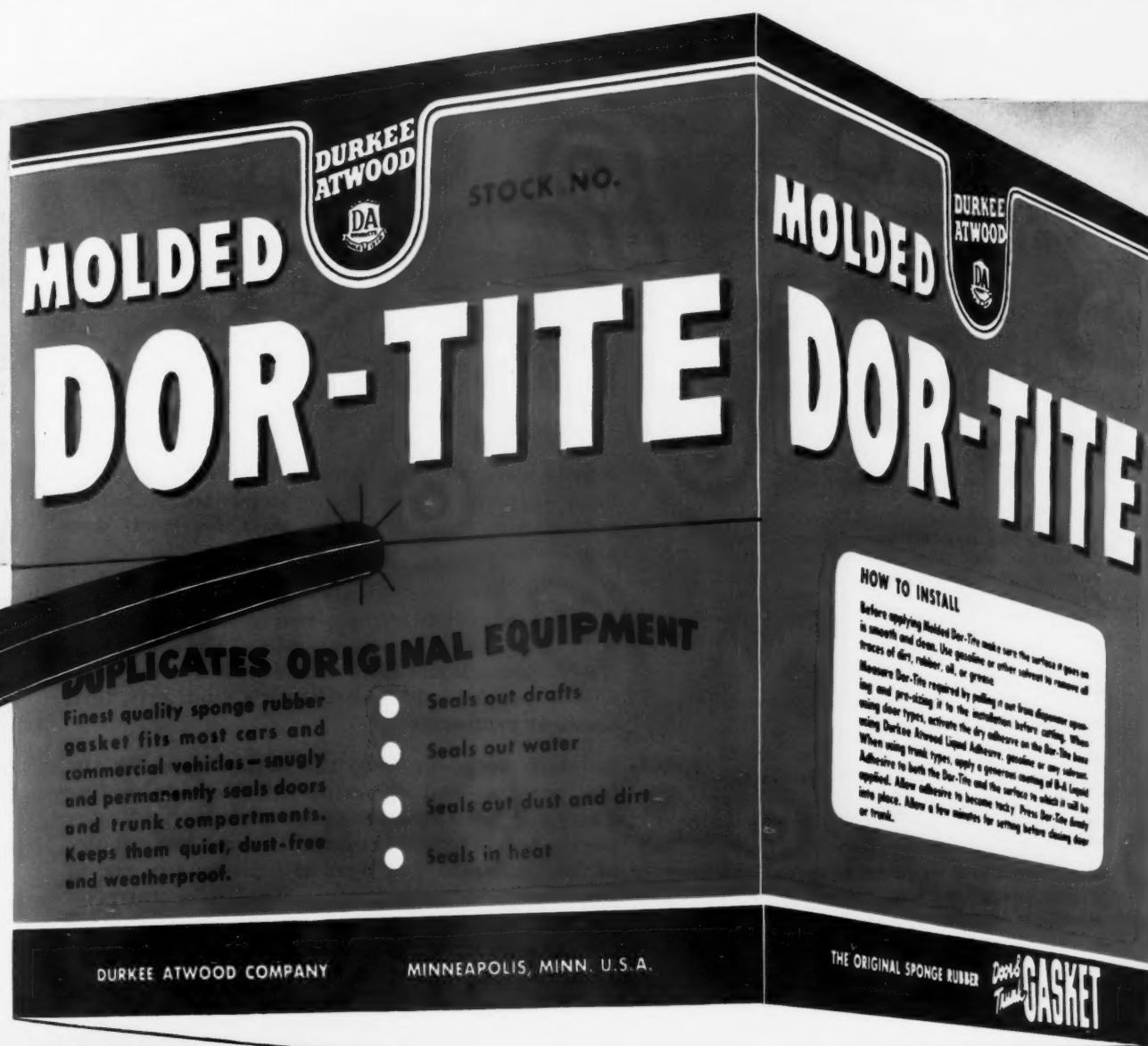
Don't pass up easy sales of inexpensive Standard Dor-Tite, the original sponge rubber gasket with the patented fabric base. Available in black or Non-Stain (off-white color) Dor-Tite. A fast-selling, long-profit item with scores of uses.



# DURKEE-ATWOOD



# Easy-to-handle *Door & Trunk* GASKET WITH EXCLUSIVE DISPENSER



*Superfine Quality  
Super Convenience*

SEND FOR NEW DURKEE-ATWOOD MOLDED DOR-TITE  
DESCRIPTIVE CATALOG AND NAME OF NEAREST JOBBER

**Durkee-Atwood Company, Dept. MA10**  
Minneapolis 13, Minnesota

Gentlemen: Send your free descriptive catalog on  
Molded Dor-Tite, and tell me the name and address  
of your nearest jobber.

NAME \_\_\_\_\_

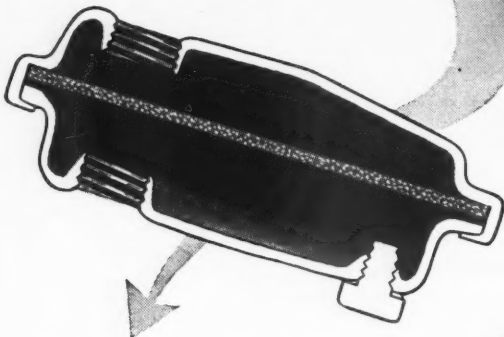
ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_

**COMPANY**

MINNEAPOLIS 13, MINNESOTA

# MORaine ALL-METAL GASOLINE FILTER



Here is the new all-metal filter shown in actual size. Cutaway shows simple, rugged construction—a sturdy metal filtering disc permanently sealed between the two halves of the steel housing.

## IT HAS EVERYTHING

No other gasoline filter has all these advantages:

- Easy to install—only 2½ in. diameter by 1 in. thick • Unbreakable—built of steel and tough Durex metal • Lightweight—no strain on fuel line • Easily drained and cleaned—just remove the drain plug • No loose parts—nothing to adjust, remove, replace • Leakproof—with permanent sealed-in gasket • Low retail price—fast turnover.



Display package of 12 filters speeds sales

**SIMPLE**

**SURE**

**STRONG**

**SAFE**

**HIGH IN EFFICIENCY**

**... LOW IN PRICE**

NOW no one can afford to do without a gasoline filter—for here is one that is so positive in action and so inexpensive that it pays for itself over and over.

Yes, it is all-metal—a strong steel housing, enclosing a sturdy filtering element of Durex metal. (Only the gasket is non-metallic.) Gasoline flows freely through the filter element, but everything else is stopped cold—whether it's dust, grit, lint, scale, or even water.

Be ready to profit from the little filter with the big market—put Moraine All-Metal Gasoline Filters on your counter today. Order the display packages—12 filters in each. You have your choice of four different packages of fittings, any one of them free with each display—No. 728 for universal application, or assortments for three groups (30 makes) of cars and trucks.



Moraine Gasoline Filters are distributed nationally by United Motors Service. Order a supply from your local distributor.

**MORaine PRODUCTS**  
DIVISION OF GENERAL MOTORS  
CORPORATION, DAYTON, OHIO

Are You  
Getting  
**ALL 7**



- 1 The right Brake Lining for EVERY Reline Job —BAR NONE.
- 2 More Profit on every reline job.
- 3 Brake Linings that go on *FAST*—adjust quickly and bring repeat business.  
  
More value per dollar for every kind of customer—those who want the *BEST*; those who want *SAFETY* at a Saving; and operators of Taxi-Cabs, Trucks, Tractors, and Trailers.
- 4
- 5 Personalized Colorful Advertising that helps you sell.
- 6 Simplified Catalogs that save your time.
- 7 Leadership in Brake Lining Development that gives you the *BEST THINGS FIRST*.



Only the  
**Gatke** Program  
Gives You **ALL 7**

Ask your GATKE JOBBER or write

### **Gatke** Grooved DURA-BLOK

The long-wearing Brake Lining with the grooves. Goes on *FAST* and adjusts *QUICKLY*, for relines that bring repeat business and give you extra profit on every job.

**Gatke**  
A GREAT NAME IN BRAKE LINING  
GATKE CORPORATION—Automotive Division  
General Offices: 228 N. LaSalle St., Chicago 1, Ill.

Factories at Warsaw, Indiana and North Brookfield, Massachusetts



It's only the beginning...

HALF A MILLION

"ROCKETS"

NOW ON THE ROAD!



—And still the demand goes  
**UP—UP—UP—**Oldsmobile  
dealers report!

*It's the talk of the trade!* Now, more than 500,000 "Rocket" Oldsmobiles are in owners' hands—more than half a million drivers are enjoying the satisfying smoothness and flashing power of 135-h.p. high-compression action! Everybody wants to ride the "Rocket"—the power plant that's setting new standards of performance, flashing action and economy! Everybody wants to drive Oldsmobile's exclusive Hydra-Matic—the drive that adds new smoothness and handling ease to famous "Rocket" power! It's a real selling combination that can't be beat—and America's "Rocket" Oldsmobile dealers are demonstrating that fact as never before in history!

**OLDSMOBILE**

A GENERAL MOTORS VALUE

# *Accepted!*

**by car manufacturers  
and by the trade!**

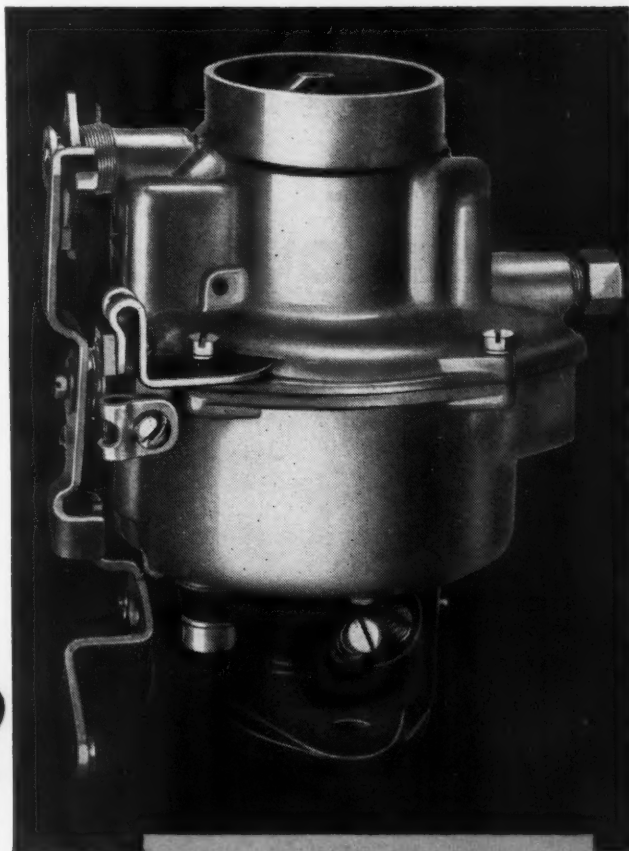
## **THE NEW ROCHESTER PRODUCTS CARBURETOR**

Rochester Products carburetors are now "big business" in two separate and distinct fields: as original equipment on Chevrolet and Oldsmobile cars and Chevrolet trucks; and as replacement items for all Chevrolets as far back as 1932.

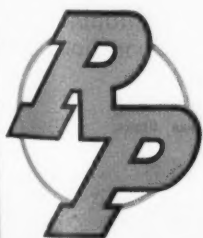
The replacement market is what you are interested in, and this new carburetor will give you volume and profits to which you are entitled.

Call your United Motors distributor for a supply of Rochester Products carburetors, and for details on the power-packed merchandising program that helps you sell them. You, too, can be part of this *profitable business!*

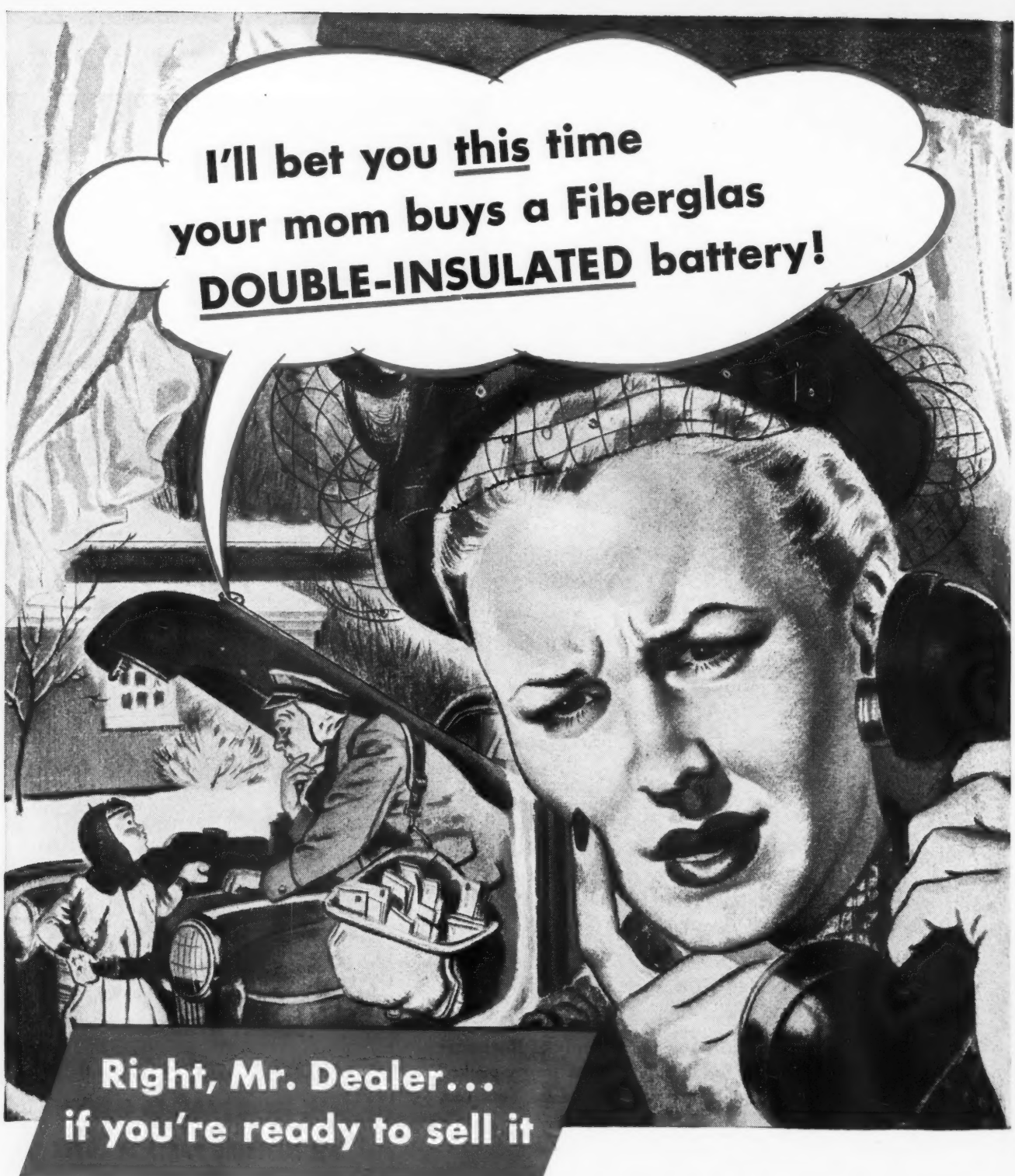
ROCHESTER CARBURETORS—A UNITED MOTORS LINE  
Available everywhere through  
UNITED MOTORS DISTRIBUTORS



- ★ NO FUEL LOSS ON ANY INCLINE
- ★ SMOOTH ACCELERATION WHILE TURNING
- ★ EASIER STARTING IN HOT WEATHER
- ★ CONTINUOUS FUEL FLOW
- ★ POWER MIXTURE READILY AVAILABLE
- ★ ACCELERATION HOT OR COLD
- ★ 40% FEWER PARTS TO SERVICE
- ★ ALL METERING PARTS IN COVER
- ★ PERMANENT IDLE TUBE
- ★ NO WEAR AT JET ORIFICE



**ROCHESTER PRODUCTS**  
DIVISION OF GENERAL MOTORS, ROCHESTER, NEW YORK



I'll bet you this time  
your mom buys a Fiberglas  
DOUBLE-INSULATED battery!

Right, Mr. Dealer...  
if you're ready to sell it

If you're displaying batteries that are double-insulated with Fiberglas\* Battery Retainer Mats . . . if you're prepared with the story of their longer life . . . then it's easy to sell these top-profit batteries. And it's easier than ever today because people are glad to pay a little extra to get longer battery life. Be sure you cash in . . . with Fiberglas double-insulated batteries. Owens-Corning Fiberglas Corporation, Department 50-J, Toledo 1, Ohio.

\*FIBERGLAS is the trade-mark (Reg. U.S. Pat. Off.) of Owens-Corning Fiberglas Corporation for products made of or with glass fibers.



IS IN YOUR LIFE...FOR GOOD



# DE SOTO... no car

in America has bigger brakes

... another reason why De Soto

owners say, "Regardless of

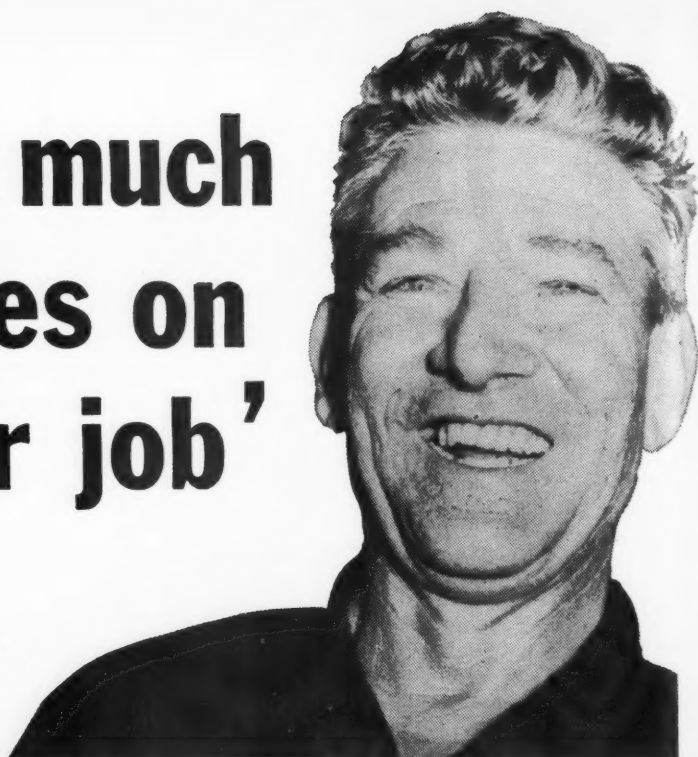
price ... best car I ever owned!"



*Don't miss GROUCHO MARX in "You Bet Your Life" on both radio and television (NBC networks) presented by De Soto-Plymouth Dealers. DE SOTO DIVISION, CHRYSLER CORPORATION*

# 'Saves us as much as 30 minutes on a carburetor job'

*report the McDermotts of  
College Auto Electric Service,  
College Point, New York*



"How do we like the Hygrade Fingertip System? We think it's one of the best things that's come into the shop in a long time," says Bud McDermott. "Very definitely has helped us to get the jobs out of the shop faster."



"Dad and I have been repairing and rebuilding carburetors for a long time. Still, we were able to pick up short cuts from the Hygrade Manual that saved us as much as 30 minutes on a job."



**\$69<sup>75</sup> complete!**

Includes the priceless Hygrade Manual, assortment of 20 kits to repair all Chevy, Plymouth, Ford carburetors; all the tools and equipment you need; cabinet; a continuing bulletin service; metal signs, outdoor banner, etc. (This outfit is worth over \$100.00.)

Would you like to know how the revolutionary Hygrade Fingertip System can make you a skilled carburetor repair man and rebuilder in one week's time? How you can rebuild carburetors in 25% less time, if you are already doing this type of work yourself? How you can set up your own carburetor rebuilding department for only \$69.75, complete, and get back your entire investment from the profit on 9 jobs? Then write us today. We'll send you full information, without obligation. HYGRADE PRODUCTS DIVISION, Standard Motor Products, Inc., 35-35 Thirty-fifth Street, L. I. C. 1, N. Y.

## HYGRADE

### FINGERTIP SYSTEM of CARBURETOR REBUILDING

*by the makers of Blue Streak Ignition Products*

As advertised  
in 1/2 pages in



### Another reason why Valvoline thins out less in the Danger Zone

(Those last few hundred miles  
before oil-change time)

In the manufacture of motor oils, it is very important to use the right amount of heat during distillation. By the *right* amount, we mean *enough* to remove all the weak, undesirable parts of the crude oil, but *never excessive* amounts that would destroy the *natural* qualities.

### Valvoline naturally better

In manufacturing Valvoline, it is never necessary to use excessive heat. Reason: Valvoline is made from 100% Pennsylvania crude oil, which in its natural state, has fewer impurities to be refined out.

Valvoline's time-proven process of Selective Refining removes only the unwanted parts of the crude oil. It leaves the fine natural rich lubricating qualities in the finished motor oil.

This is why Valvoline affords more natural oiliness, more heat resistance—more of the fine protective features.

### Valvoline offers more to YOU and your CUSTOMERS

Valvoline does more than just *promise* complete satisfaction; Valvoline gives a **GUARANTEE**—in Writing. And here's another big sales-making feature: Valvoline offers new-car purchasers a 33,000 Mile Guaranty against lubrication failure.

**Ask Your Valvoline Man** how dealers all over America are cashing in on these big Valvoline extra offerings.

(See list of Valvoline branches opposite)



**KEEPS FIGHTING**  
*in the 4th quarter!*



Valvoline is naturally durable — does not require the larger quantities of chemical additives used in making many Premium motor oils.

Reason: Valvoline is made from 100% pure Pennsylvania crude oil — the cream of it.

Nature made Valvoline better . . . Valvoline is better for your motor.

#### BUYING A NEW CAR?

You can protect it for 33,000 miles.

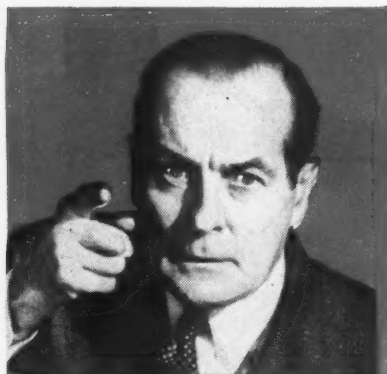
Have your dealer show you the VALVOLINE 33,000 mile Lubrication Guaranty . . . "it doesn't cost a penny."

# VALVOLINE

**100% PENNSYLVANIA  
MOTOR OIL**

Freedom-Valvoline Oil Company, Freedom, Pennsylvania — New York, Toronto, Pittsburgh, Jacksonville, Atlanta, Detroit, Cincinnati, Chicago, Los Angeles, San Francisco, Portland, Seattle, Vancouver, B. C.





**Here's Your Program to Meet  
Tomorrow's Extra Service Problems . . .**

**DON'T GUESS . . . TEST!**  
**more Important for the  
Days Ahead Than Ever Before . . .**



### **SUN MASTER MOTOR TESTER**

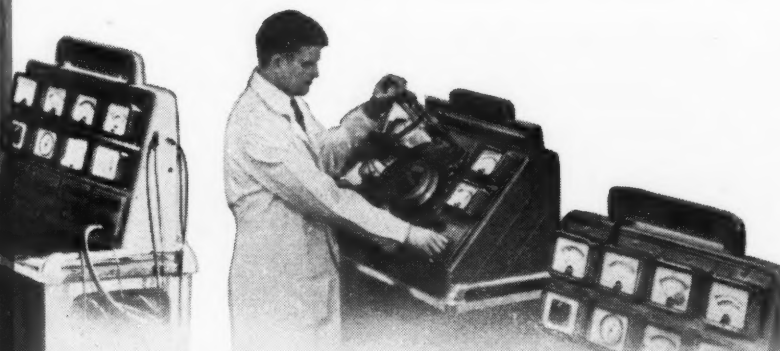
A high-precision instrument designed to test ignition, compression and carburetion, the three major divisions of all engines. SUN's 300-Man Sales and Service Organization assures you of prompt, efficient service anywhere in the U.S.



### **Write for the NEW, Illustrated SUN CATALOG**

Contains valuable information on the new Diagnosis Program, details on the SUN Sales and Service Organization and SUN Training as well as complete descriptions and illustrations of all SUN Scientific Service Equipment. No cost or obligation—write for your copy TODAY!

R-5298



**America's Wheels Must be Kept Rolling . . . More Vehicles Will  
Require Service . . . More Demand . . . Reduced Manpower . . . All  
Spell Need for Doing More Jobs, Quicker and Without Guesswork!**

A SUN Master Motor Tester at the elbow of *every mechanic* doing engine repair! That's the beginning of a program that will **MAKE EVERY MAN MORE EFFICIENT . . . ENABLE YOU AND HIM TO MAKE MORE MONEY . . .** at the same time conserving the nation's manpower resources. This SUN Program will cut time-per-job, insure better work at higher profits and build greater customer goodwill for your shop. Your mechanics, equipped with SUN Master Motor Testers, can put their fingers on the exact cause of motor troubles . . . no guesswork, no lost time, no waste motions.



**SUN "On-the-job" training** solves your manpower problem. No loss of time. No interruption of regular work schedules. This is a basic advantage you get with all SUN Equipment. Further, you always have the opportunity of sending selected men to any one of the 15 SUN Technical Training Schools for post-graduate training. Why not prepare NOW to meet tomorrow's extra service problems? Call your local SUN Representative or write for complete details TODAY!



**Sun**  
**ELECTRIC CORPORATION**

6353 Avondale Avenue • Chicago 31, Illinois

# Join the Big Parade!



Johns-Manville jobbers now have  
the best there is for dealers

✓ Products  
✓ Promotion  
✓ Profits

Results of nation-wide survey confirm new business-building features for dealers in expanded J-M friction materials line

This new, expanded Johns-Manville Brake Lining Program is based on a nation-wide survey of distributors that told us exactly what dealers across the country need for increased business and profit in 1950!

Here's just a few of the new items this Johns-Manville expanded program includes: important improvements in brake and clutch products; streamlined new shoe exchange plan for bonded-on linings; attractive, new sales-help literature; more local stations added to the largest radio program of any brake lining manufacturer ... and many other important, new dealer-promotion features.

An outstanding new item in the line is WireKlad, an improved brake lining development with an exclusive, revolutionary new wire reinforcement. Another new item is the finest-looking, better performing Spiral Wound Clutch Facing, that makes clutch relining faster, easier, and more profitable.

It will pay you to write Johns-Manville today or get in touch with your Johns-Manville distributor. Get the details of this new, bigger and better Johns-Manville friction materials program for 1950 ... address Johns-Manville, Box 290, New York 16, N. Y.

"Bill Henry and the News"  
Mutual Broadcasting System  
8:55 P.M. E.S.T. Mon. thru Fri.



NEW ...  
WireKlad linings and  
Spiral Wound facings!

These two important new products star in the expanded Johns-Manville line for 1950! WireKlad is the newest and most revolutionary development in brake lining manufacture and highly stable performance.

Spiral Wound facings give drivers the amazing new "cushion" clutch action, plus the lowest rate of wear. They have excellent appearance; are easy and economical to install!

**Johns-Manville**

*Asbestos*

The **FIRST** name in asbestos brake linings  
"Get It From Your Jobber"

**FRICTION MATERIALS**

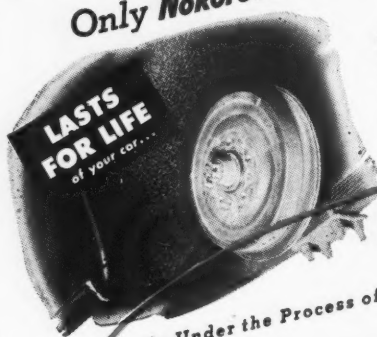
# WE'LL HELP YOU SELL AMERICA'S FASTEST SELLING UNDERBODY COATING

**Why** YOUR CAR NEEDS  
**LION Nōkōrōde**  
UNDER-CAR SEALER AND SILENCER



**Nōkōrōde Muffles Noises...Protects Against Rust**

Only Nōkōrōde Contains **Silent-Tite\***



\*An ingredient that makes Nōkōrōde more adhesive, more cohesive, more dense, and a better sound-insulator. It's good-bye to annoying squeaks and rattles when Nōkōrōde "blankets" the entire underbody of your car. And it's good-bye to rust and corrosion, too... because superior Nōkōrōde gives the underbody an unbroken "coat" with no opening for rust and corrosion to get a start. For a really quiet ride... for real protection that lasts the life of your car insist on Lion Nōkōrōde—the superior under-car sealer and silencer. Nōkōrōde is made from the finest selected asphalts by Lion Oil Company, one of the world's leading manufacturers of asphalts. Nōkōrōde is naturally black—no useless coloring matter added.

**Nōkōrōde is Guaranteed by  
LION OIL COMPANY**



Made Under the Process of U.S. Patent No. 2,393,774

## IT'S GUARANTEED!

WRITE, wire or phone Lion Oil Company today for Lion's complete, backed-by-advertising plan. It can bring you extra profits...in a hurry.

Nokorode sprays on thinner and dries faster because it is made in concentrated form. Actually, Nokorode forms a much tougher, more adhesive coating than other products which are applied two or three times thicker... so, with Nokorode, you save up to 1/2 your material cost per job! You profit more... because you use less material, yet get the job done faster, better and at lower cost. (Nokorode can be applied as thick as is recommended for competitive products, but

it's not at all necessary.)

Why is Nokorode superior? Lion's patented process makes Nokorode more adhesive, more cohesive, more dense, and a better sound insulator.

Made from the finest selected asphalts by Lion Oil Company, one of the world's leading manufacturers of asphalts. Nokorode is naturally black—no useless coloring matter added.

with  
ADS  
LIKE  
THIS

IN THE  
SATURDAY EVENING  
**Post**  
and  
**TIME**

Full page advertisements like these in The Saturday Evening Post and Time pre-sell Nokorode to your customers... help you sell more Nokorode... make extra profits... faster!

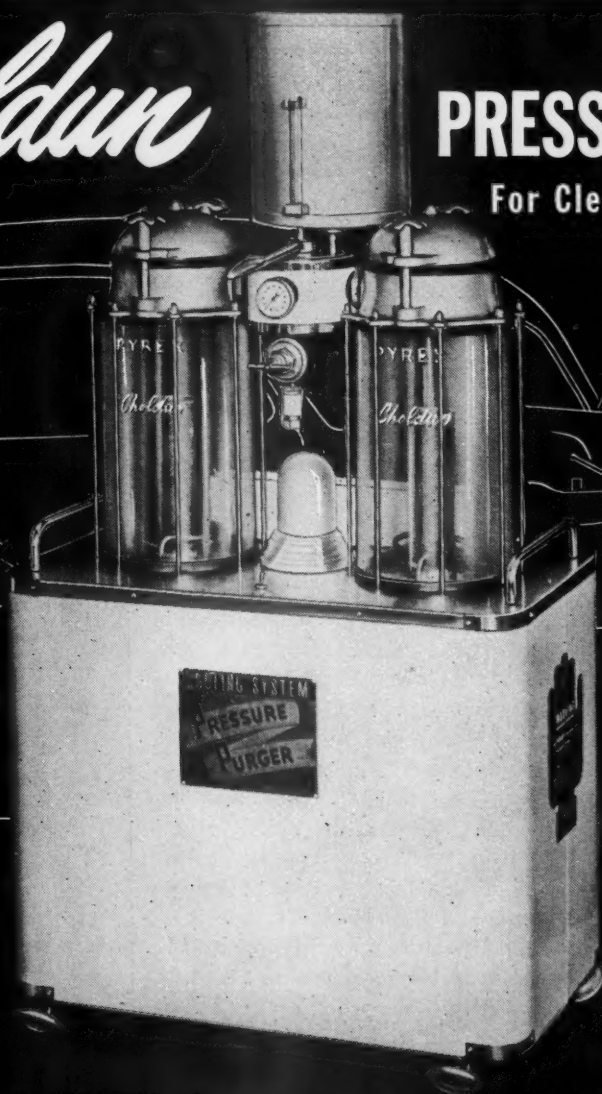
## LION OIL COMPANY, El Dorado, Arkansas



# Choldun

## PRESSURE PURGER

For Cleaning Cooling Systems



## GET MORE ANTI-FREEZE BUSINESS THIS FALL!

PROMOTE COOLING SYSTEM SERVICE BEFORE INSTALLING ANTI-FREEZE

Effectively purges radiators and motor blocks by mechanical agitation with pre-heated purging solution. New scientific baffle vent retains purging solution throughout entire operation without waste.

Nationally advertised price, **\$295.00**

# Choldun



**MANUFACTURING CORP.**

*New Haven, Conn.*

SALES OFFICE: 11 WEST 42 STREET, NEW YORK 18, N. Y.  
EXPORT OFFICE: 238 Main Street, Cambridge 42, Mass.

### CHOLDUN MANUFACTURING CORP.

11 West 42nd Street, New York 18, N. Y.

- ☐ Please send me Complete Details on the Pressure Purger.
- ☐ Please arrange for a Free Demonstration of the Pressure Purger.

Name.....

Address.....

City.....Zone.....State.....

—SPRINGFIELD PHILADELPHIA PITTSBURGH ATLANTA DETROIT CHICAGO KANSAS CITY DALLAS DENVER LOS ANGELES TORONTO—

*Time Savers...*  
**KEN** TIRE CHANGING **TOOLS**  
...they're "Job Designed"

**KEN-TOOLS** are hand forged from chrome nickel alloy steel...heat treated for extra long life...Best By Actual Test!

**KEN-TOOL...** LARGEST EXCLUSIVE MAKERS OF TIRE AND WHEEL CHANGING TOOLS

See Your Local Jobber for Our Complete Line  
**The KEN-TOOL Mfg. Co.**  
Akron 5, Ohio

SORRY FELLOWS, IF DELIVERIES ARE A LITTLE SLOW---THEY EVEN HAVE ME MAKING

**SOUTHERN FIBER BLOCK**

**SOUTHERN FRICTION MATERIALS CO.** CHARLOTTE, N. C.

America's No. 1 Hot Water Car Heater

**Arvin**

**UNIVERSAL MODEL 200**  
Recirculating type—fits most makes of cars and trucks.

**MODEL 300**  
Fresh-air type—tailor-fitted for 1949-50 Chevrolets, Pontiacs.

## More Low-Priced Sales

Car buyers are tending to purchase more low price and lower medium price cars than the higher priced vehicles, a study by R. L. Polk & Co., Detroit, statisticians for the automotive industry, discloses.

Thus far this year there has been a distinct trend toward lower priced new cars, according to new car registration figures. The percentage of upper medium and high priced cars has, on the other hand, declined against other post-war years.

As of the end of the first quarter of this year, approximately 200,000 more new cars in the low price group had been registered than during the same period last year. An increase of approximately 100,000 more cars in the lower medium price group was noted, while in the upper medium price group a decline of 30,000 units was reported. The high price group showed a distinct decline, totals being some 5,000 less than for the same period of 1949.

The trend observed during the first quarter confirms figures apparent all through 1949. As of December 31, the low price group had a million more new cars registered than for the year of 1948. The lower medium price group had some 400,000 more new cars registered than in 1948. The percentage of difference between the upper medium priced cars and the high price group, however, was much narrower than current figures.

## Engineers Purchase Reclamo

Control of Reclamo Manufacturing Co., Chicago, maker of oil filter-refiners, has been purchased by Harry J. Wallace and Fred Tronvig, Chicago mechanical engineers.

The Reclamo device is designed to remove both water and gasoline from automotive, diesel and tractor crankcase oil, in addition to filtering out impurities, with the object of permitting continuous use of lubricating oil over years without draining the crankcase.

## Rebuilt DISTRIBUTORS



Outstanding values in VAN rebuilt Delco, Autolite and Ford Distributors. New points, condensers, caps and rotors. All other parts are renewed or replaced. Tested and guaranteed like new. Send your order now for prompt shipment... catalog sheet and price list on request.

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2306 N. 15th St.  
PHILADELPHIA



## MICHIGAN ENGINE BEARINGS

Standard equipment in America's leading automobiles for more than 25 years.

**DETROIT ALUMINUM & BRASS CORP.**  
DETROIT, MICHIGAN

**KEEP DOWN COST-per-MILE with BEAR!**

Increase tire mileage, cut accident costs! Make or get Bear Tests for Dy-Namic Wheel Balancing, use Bear Alignment, Straightening Equipment; the leaders do! **BEAR MFG. CO.**, Dept. M-1, Rock Island, Ill.

1736

**Genuine SERVICE** INDIANAPOLIS  
"Measurably Better"  
**SPRINGS**

**SERVICE SPRING COMPANY**  
INDIANAPOLIS 6, INDIANA

## THE COMPLETE LINE

that Completely Satisfies Since 1906

The Fitzgerald Mfg. Co.  
Torrington, Connecticut



**Fitzgerald**  
GASKETS



## String Along!

● You can do a lot more business in your shop and make a lot more money for yourself if you have the ambition and the will to go ahead.

The formula is easy. Get yourself some new equipment. *Modernize.* Show your customers that you're on the ball and have what it takes to give them quick, reliable service on all kinds of repair jobs from diagnosis to finished work.

New equipment is the bait that attracts new business . . . more business . . . and lets you handle it better, faster and more profitably.

The method is easy, too. String along with A.E.P., the economical way for you to buy and install new equipment that will pay for itself as you use it.

Don't hold back. Start growing. Ask your jobber to help you work out an A.E.P. program.



THE BEST EQUIPPED SHOP  
GETS THE PROFITABLE BUSINESS

BUY . . . AND FINANCE . . .  
THROUGH YOUR JOBBER

ONE CONTRACT . . . ONE COST  
. . . INSURANCE INCLUDED



*If you don't know about A E P . . . ask your jobber.*

# COMMERCIAL CREDIT CORPORATION

A Subsidiary of

Commercial Credit Company, Baltimore • Capital and Surplus Over \$100,000,000

MORE THAN 300 OFFICES IN PRINCIPAL CITIES OF THE UNITED STATES AND CANADA



## New Olds Six?

Announcement by Oldsmobile that it was abandoning its six-cylinder model 76 has lead to considerable speculation that the division would announce a new six-cylinder engine, possibly a V-6 for its 1951 models. It seems highly unlikely, however, that such would be the case since the engine plant producing six's is in the process of being tooled for additional production of the Rocket Eight engine and there simply is no manufacturing space available to produce a six. Whether or not Olds will eventually return to a six in its line has not yet been decided by the management which says that economic conditions will undoubtedly play an important role in such a decision.

## New Model Plans

Despite the confusion of the current war situation it seems apparent that new model changes are going ahead as scheduled. Packard has announced its 1951 line and three other independents will announce their new models in late September or October. The Big Three also are expecting to go

ahead with original plans on new models, but later, either at the end of this year or early in 1951. Actually, die work and other commitments are too far advanced at this stage to call back without the expense and confusion amounting to more than would be the case if current models were continued.

## Used Car Dealers

The National Used Car Dealers Assn. will emphasize industry-wide cooperation and unification at its annual convention to be held Nov. 8-11, at Dallas, Texas. Headquarters will be in the Baker Hotel.

## Shorter Month to Cut September Production

Although automobile and truck production continues at the high rate prevailing in August, September production figures when available are expected to show about 700,000 or a drop of about 120,000 units below the August total. The reason is that September has fewer working days because of the shorter month and the Labor Day holiday. October is expected to be a high production month with 22 working days available and apparently enough material in sight to maintain current high production rates. Also, most of the labor troubles have been settled, making for uninterrupted production. Down time for model changeovers is not expected to hit this month at any major company, so the outlook is for another high production total for October.

## Marvel-Schebler

Robert J. Minshall, president of Pesco Products Div. of Borg-Warner, has also been named vice president and general manager of Marvel-Schebler Products Div., formerly Marvel-Schebler Carburetor Div. S. W. Gray will remain as president of Marvel-Schebler as a consultant on sales policy. Production of fuel pumps for jet plane engines marks an expansion in the division's activities which are being transferred from Flint, Mich., to a new plant at Decatur, Ill. The plant has been equipped with new machinery for fuel pump manufacture which is expected to begin about the middle of this month.

## BURNDY HYSARK

The  
ignition  
terminal  
that fits  
ALL  
spark plugs.



for information write:  
**BURNDY, New York 54**

## HAVE YOU A JOB FOR A TRAINED MECHANIC?

We have a number of alert young men who have completed intensive training in Automotive Mechanics, Automatic Transmissions, and Body-Fender Rebuilding. They learned their trades thoroughly by working on actual equipment under personal, expert supervision. If you need a trained man, we invite you to write for an outline of our course, and for a prospectus of the graduate. No fees, of course. Address:

Placement Manager, Dept. P102-10

**COMMERCIAL TRADES INSTITUTE**  
1400 GREENLEAF CHICAGO 26

## APA Attention JOBBERS

ORIGINAL AND ONLY POWDER FORM  
WAX AND GREASE REMOVER

**Our Product (APA) enables you to blend-in Lacquer over Enamel**

Prompt shipments from our factory.  
12-oz. container \$1.50. Cash or C.O.D.

**AUTO PAINTERS AID CO.**

Dept. A, Box 668 Spangler, Pa.

## CRESCENT

*Wiry Joe*

**AUTOMOTIVE CABLE**

Manufactured by  
**THE CRESCENT COMPANY, Inc.**  
Pawtucket, Rhode Island



**CHECK THE WIRE  
ON EVERY JOB**

## DREW Ameroid Carburetor and Parts Cleaner

**It's New! It's Better!**  
It brightens and polishes as it cleans!

Automotive Division  
**E. F. DREW & CO., INC.**  
15 E. 26th St.  
New York 10, N. Y.



Offices and Warehouses in principal cities

When you call for

## DURO CHROME

you're sure of getting



*Doggone  
Good  
Tools!*

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**DURO METAL PRODUCTS CO.**

2649 N. Kildare Ave., Chicago 39, Ill.

Makers of Nationally Advertised DURO Power Tools

## FULL OIL DRESSED CHAMOIS

direct from  
English Manufacturer

Write for price lists

**LONDON & PROVINCIAL MERCANTILE CO.  
LTD.**

30 Borough High Street, London, S.E. 1

Joe did a perfect job  
of engine reconditioning



The customer was happy  
for two solid weeks...



Then  
This was the end of a Beautiful Friendship

Joe, it didn't have to happen. You should have done what thousands of good mechanics do—check every connecting rod for defects. When you replace 'em with Federal-Mogul rebabbitted or reconditioned rods (which you can get on an exchange basis or outright purchase, from your Federal-Mogul Jobber) you'd still have this customer boosting for you. It pays in the long run, Joe!

**FEDERAL-MOGUL SERVICE • DETROIT 13, MICHIGAN**  
Division of Federal-Mogul Corporation



**THE COMPLETE LINE—MORE THAN 7,000 ITEMS**  
Engine Bearings (Main, Connecting Rod and Camshaft)  
• Bushings • Connecting Rod Exchange • Reconditioned Connecting Rods • Rebabbitted Connecting Rods • Connecting Rod Bolts and Nuts • V-Seam Piston Pin Bushings • Bearing Metals • Laminated Shims.

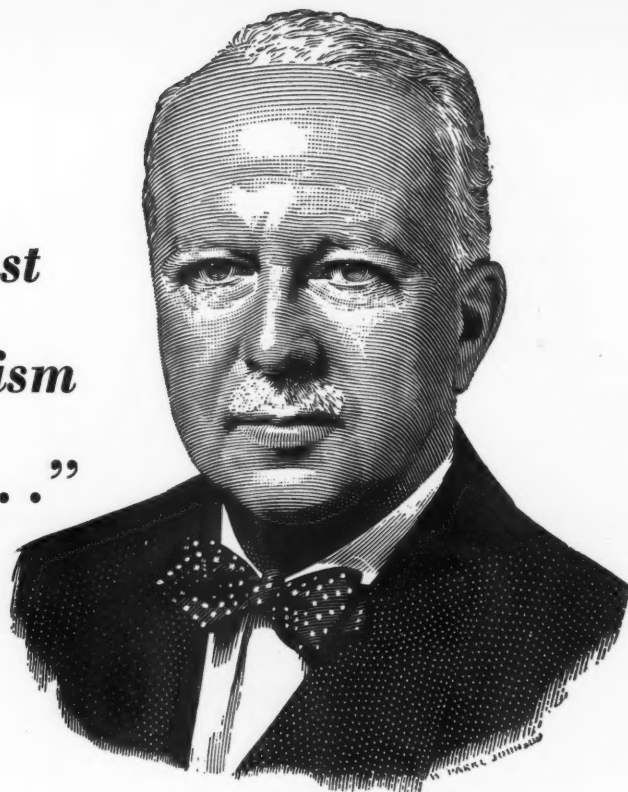


**What to look for when  
checking connecting rods**

Out-of-round bore; Cap misalignment; Worn piston pin bushing; Twisted rod blade; Stretched or broken bolt threads; Broken nut threads; Filed-down parting faces. Replace rods with these defects!

Ask your  
Federal-Mogul  
Jobber!

*"The immunizer against  
the disease of communism  
is a certain feeling..."*



**MR. WALTER S. GIFFORD**

*"It is the feeling of a man who owns a home, a bank account, an insurance policy. It is the feeling that an employee on the Payroll Savings Plan has when he gazes at his accumulation of Savings Bonds and realizes that here is palpable evidence that he has made a profit on his job—that the profit system works for him as well as for his employer."*

Mr. Gifford has believed in—and worked for—payroll savings plans for thirty-seven years—since 1913, when, as Statistician of the A. T. & T., Mr. Gifford developed a payroll savings plan for the purchase of A. T. & T. stock.

In 1938, A. T. & T. employees were offered a Payroll Savings Plan for the purchase of U. S. Savings Bonds. To date, Bell System employees have invested **more than half a billion** dollars in savings bonds—with a maturity value in excess of \$675,000,000.

In upwards of 21,000 large companies, more than 8 million Americans are investing \$150,000,000 in U. S. Savings Bonds **every month**. To the systematic saving of these men and women—and the whole-hearted co-operation of executives like Mr. Gifford—is due in no small

measure the important feeling of ownership shared by the Americans who own 56 billion dollars in U. S. Savings Bonds (against 45 billions at the end of the war!).

Every Payroll Savings Plan is a reflection of the vision and enthusiasm of the top executive of the company. If he gets behind it, **personally**, employee participation is high—to the benefit of the country, the company and the employee. If the interest of the Big Boss is active—participation may very well exceed the 50% mark. The top man is the key man in a Payroll Savings Plan.

Get in touch with your State Director, Savings Bond Division, U. S. Treasury Department. He will help you put in a plan . . . or he will show you how to increase employee participation—without undue effort or high pressure tactics.

The U. S. Government does not pay for this advertising. The Treasury Department thanks, for their patriotic donation, the G. M. Basford Company and

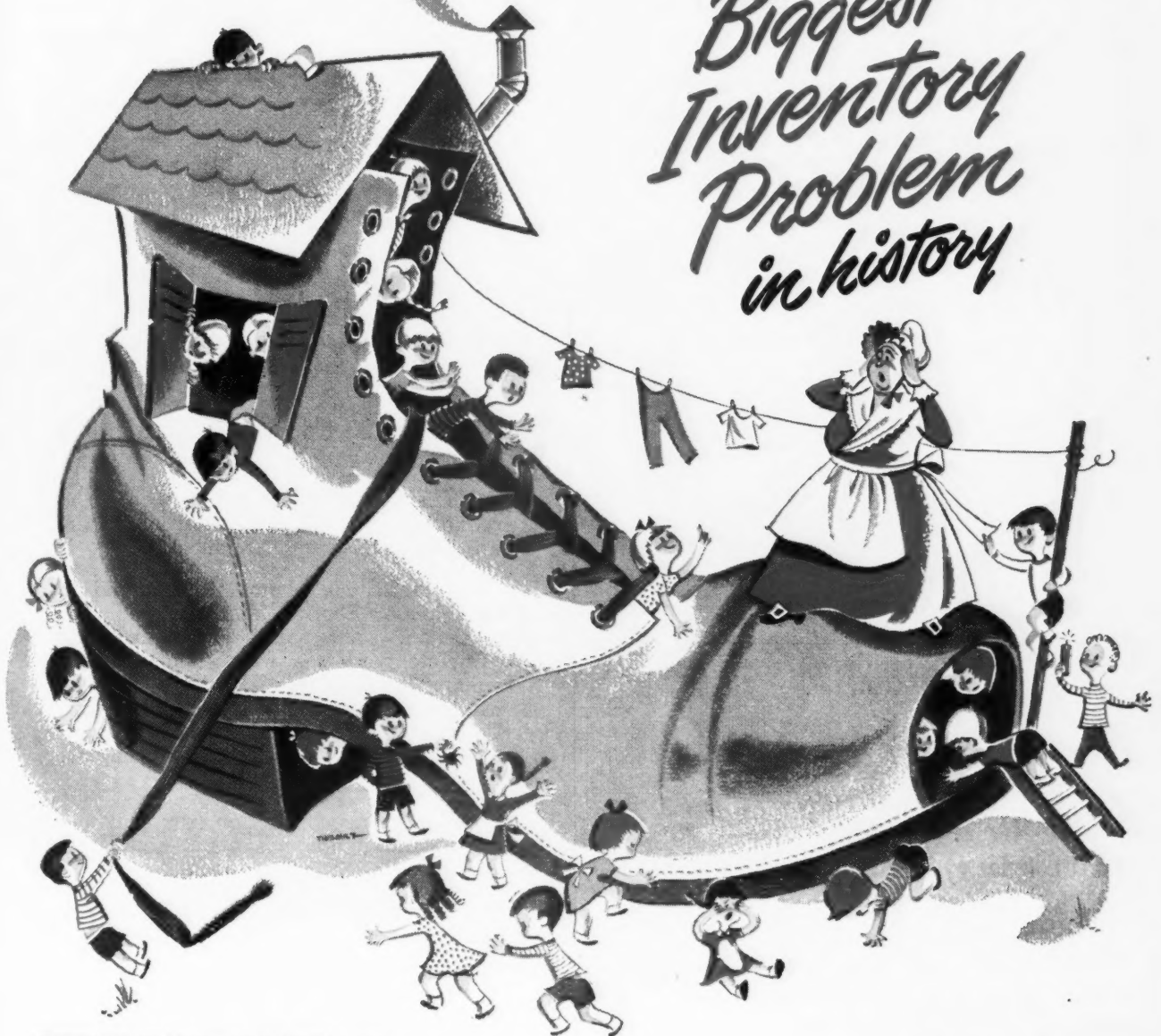
**MOTOR AGE**





# How a little old woman solved the . . . .

## Biggest Inventory Problem in history

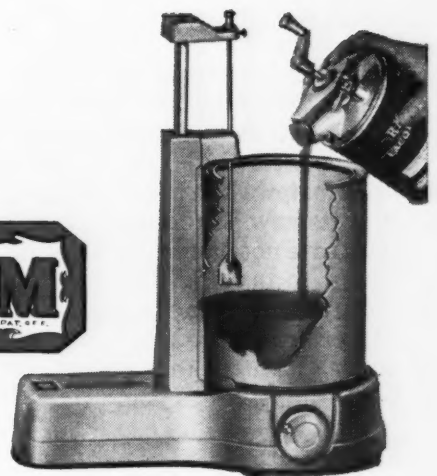


THERE WAS an old woman who lived in a shoe,  
She had so many children she didn't know what to do;  
She gave them some broth without any bread,  
Then whipped them all soundly and sent them to bed!

. . . Thus was solved the biggest inventory problem in history;  
but the dickens of it all was that this solution offered only *temporary*  
relief, for with every morning the poor old woman woke  
to find her inventory problems with her yet.

NOT SO with your automotive paint inventory headaches,  
for you can whip these problems *permanently* with the high-precision  
R-M Tintometer Color Matching System. You can, whether you are a Jobber  
or Refinisher, maintain a very small paint inventory, yet quickly and  
accurately PREPARE ANY CAR COLOR AS NEEDED. You can assure  
yourself a consistent stock turnover and increase your operating profits!

*Drop us a card or call us now for details!*



RINSHED-MASON COMPANY . . . 5935 MILFORD, DETROIT 10, MICHIGAN

Chilton's MOTOR AGE, OCTOBER, 1950

# D-X MOTOR OIL

IS STEPPING OUT IN ITS NEW

*Sunday Clothes...*



The Most Colorful Drum in  
the Oil Industry Will Help You

## STEP UP SALES !

It's here! Look at it! The oil industry's first full-color lithographed drum. And it contains a motor oil that has been "Ahead of the Parade" for 25 years—D-X Motor Oil with the "extra" of Extrinol. D-X dealers everywhere will find D-X moving even faster when customers see it in its new "Sunday Clothes." If you are not handling D-X now, write today for details about a profitable D-X dealer franchise and the many advantages and sales helps that it gives you.



**MID-CONTINENT PETROLEUM CORPORATION**  
TULSA, OKLA.

Terre Haute, Ind. • Omaha, Nebr. • Minneapolis, Minn.  
Waterloo, Ia. • Chicago, Ill.



*from*  
**BUMPER TO BUMPER . . .**  
*you need* **CHANNELLOCK**

*Made only by* **CHAMPION DEARMENT**

On almost every repair job in the garage you use pliers—and where pliers are used you Need Channellock.

Channellock pliers are designed to give longer Service and more efficient operation. The patented Channellock principle permits a wide range of sizes without loss of grip or leverage. They are made of strongest materials by Champion DeArment who for nearly 3/4 of a century have been making and selling highest quality tools.

If you are working on cars you use pliers—and if you use pliers You Need Channellock.

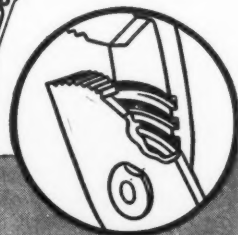
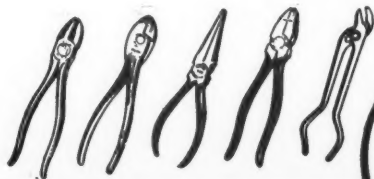
Remember, **ONLY** Champion DeArment makes Channellock.

Send for Catalog D8 today.

**CHAMPION DEARMENT TOOL CO.**

Meadville, Pa.

Channellock pliers are listed in the Yellow Pages of most Telephone Directories under "Tools"



*Only*

**CHAMPION DEARMENT makes . . .**

**CHAN NEL LOCK**

TRADE MARK REG. U. S. PATENT OFFICE

*Sell the  
Battery  
that's  
**EASIEST** to sell!*



# DELCO No. 1

**WITH AUTOMOTIVE ENGINEERS**

More Delcos are used as original equipment in new cars and trucks than any other make of battery.

That one fact establishes Delco as the first choice of automotive engineers . . . as the nation's No. 1 battery . . . as the nation's logical choice for battery re-

placements for all cars, trucks and buses.

Surely, this vast pre-sold market interests you. A Delco battery franchise puts you in line for your share of this profitable business . . . Why not sell the battery that's easiest to sell? Talk it over with your United Motors distributor.



**DELCO BATTERIES—A UNITED MOTORS LINE**

Available Everywhere Through



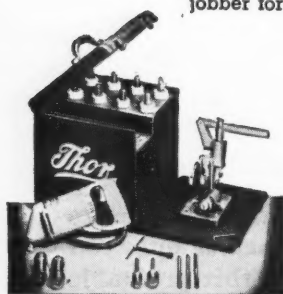
United Motors Distributors



# COMPLETE VALVE SHOP EQUIPMENT



Eight complete valve shops... 10 complete valve seat grinding kits... a complete selection of valve reconditioning accessories and equipment for all types of engines. Featured by the most modern and efficient valve refacers in use by garages everywhere, here is the big, the complete THOR valve shop line. See your Thor jobber for a demonstration.



Write for FREE Catalog E-2 listing complete Thor electric and automotive tool line.

INDEPENDENT PNEUMATIC TOOL CO.  
AURORA, ILLINOIS



**Thor** PORTABLE POWER  
**TOOLS**

ELECTRIC • PNEUMATIC

Belt Sanders

Bench Grinders

Drills

Drill Stands

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Grinders

Electric Hammers

Impact Wrenches

Nibbler

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Saws

Screw Drivers

Tappers

Valve Refacers

Valve Reseaters

Air Tool Kits

## Buckingham THREAD CLEANER



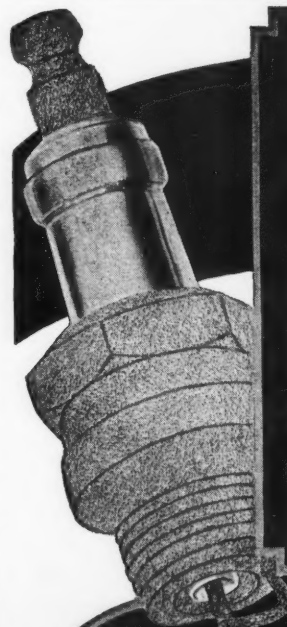
### Restore Battered and Rusted Threads

Flats and nicks eliminated — even heavily corroded threads quickly cleaned, so that nuts turn off and on freely! Think of the time and money saved! No more drilling or hack-sawing to remove damaged bolts and studs. Just slip on your Buckingham Thread Cleaner, tighten the jaws, then turn!

Buckingham Thread Cleaners follow the pitch of any thread with root diameter from 1/4" to 4". No need to insert or change dies. Cutting jaws adjust easily to proper size on the threads. The jaws should be placed below the damaged area and then turned off through that section. See your nearest Buckingham dealer — or write us today for further information.

	Price
6103—1/4" to 1" root diam.....	\$ 6.50
6203—1/4" to 1" root diam.....	8.50
6104—1" to 2 9/16" root diam.....	12.00
6106—2" to 4" root diam.....	27.50
6204—1" to 2 9/16" root diam.....	21.00

BUCKINGHAM MANUFACTURING CO., INC.  
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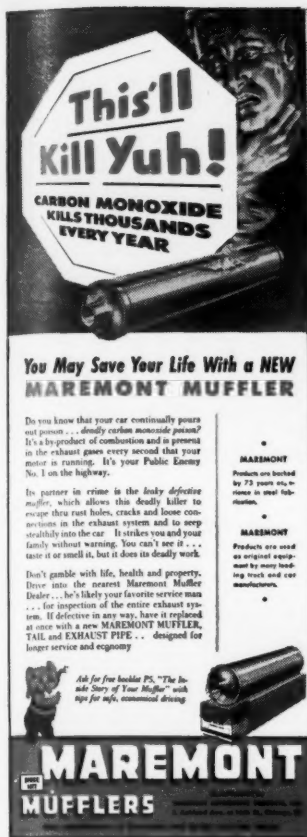
**No  
Spark  
Plug  
Is  
Stronger  
Than Its  
Insulator**

You can depend on  
**FRENCHTOWN  
INSULATORS**

- used by more spark plug manufacturers  
than any other make

FRENCHTOWN PORCELAIN CO.

8 MUIRHEAD AVE. TRENTON 9, N. J.



**This'll Kill Yuh!**  
CARBON MONOXIDE KILLS THOUSANDS EVERY YEAR

**You May Save Your Life With a NEW MAREMONT MUFFLER**

Do you know that your car continually pours out poison... deadly carbon monoxide gas? It's a by-product of combustion and is present in the exhaust gases every second that your motor is running. It's your Public Enemy No. 1 on the highway.

In nature in crime is the deadly defective muffler, which allows this deadly killer to escape thru rust holes, cracks and loose connections in the exhaust system and to seep stealthily into the car. It strikes you and your family without warning. You can't see it... taste it or smell it, but it does its deadly work.

Don't gamble with life, health and property. Drive into the nearest Maremont Muffler Dealer... he's likely your favorite service man... for inspection of the entire exhaust system. If defective in any way, have it replaced at once with a new MAREMONT MUFFLER, TAIL and EXHAUST PIPE... designed for longer service and economy.

Ask for five books: P's, "The Inside Story of Your Muffler" with tips for safe, economical driving.

**MAREMONT MUFFLERS**

**Featured in**  
THE SATURDAY EVENING  
**POST**

Starting with the October 7 issue, approximately 16,000,000 readers of the Post will see these colorful advertisements with their startling message!



**This'll Kill Yuh!**  
CARBON MONOXIDE KILLS THOUSANDS EVERY YEAR

**you may save your life with a new MAREMONT MUFFLER**

3-color easel posters for wall, window, counter

**This Powerful, Coordinated Sales Campaign means MORE MAREMONT MUFFLER SALES for YOU**

Maremont stocking franchise dealers are assured a big share of the muffler replacement business. Not only are Maremont mufflers advertised in the Saturday Evening Post... but, as shown here, *every dealer* has available one of the most intensive and most thoroughly coordinated tie-in campaigns in the industry. Maremont dealers *know* that the use of these materials pays dividends where it counts... *in the cash register.*

For full details see your nearest Maremont wholesaler, or write to the factory.

Give-away booklets

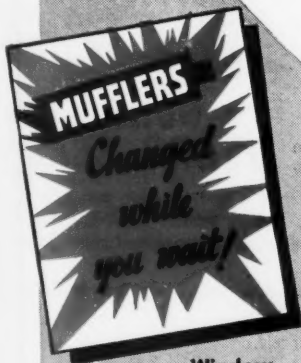


**This'll Kill Yuh!**  
CARBON MONOXIDE KILLS THOUSANDS EVERY YEAR

**MAREMONT MUFFLERS**

YOUR IMPRINT HERE

Mat Ads



**MUFFLERS**  
Changed while you wait!

Window spots



**MAREMONT QUICK QUOTE**

Quick Quoter catalogs




**MAREMONT MAILING CARD**

Dealer mailing cards



**MAREMONT INSPECTION REPORT**

Inspection reports



**MAREMONT MUFFLER**  
FOL24

**MAREMONT MUFFLERS**

SINCE 1877

ALSO MANUFACTURERS OF MAREMONT SPRINGS AND HELPER SPRINGS

MAREMONT AUTOMOTIVE PRODUCTS, INC., South Ashland at 14th, Chicago 8, Ill.

# It's CHAMP-ITEMS for **DOUBLE** Results!



## No. 947 DRAIN PLUG GASKET ASSORTMENT . .

contains six different sizes — six profit-makers! Made of special vulcanized gasket fibre of high tensile strength — long life. Colored for identification.

No. 947A, List \$.07 each.

No. 947B, C, D, E & F, \$.05 each.



## No. 949DA DEALER ASSORTMENT OF DRAIN PLUGS . .

for all cars, trucks and tractors. These plugs save money on repair jobs — save time, too!

List from \$.30 to \$.50 each.

## ① TIME SAVERS ② MONEY MAKERS

Champ-Items service parts are especially designed to do the job faster — surer — economically! That's why they're profit-makers for you!

## No. 952-3C CARBURETOR RETURN SPRING . .

designed for positive throttle return, this spring eliminates motor racing — saves fuel! Takes only a few seconds to install! Comes on attractive display card.

No. 952, List \$.15 each.

No. 953, List \$.25 each.



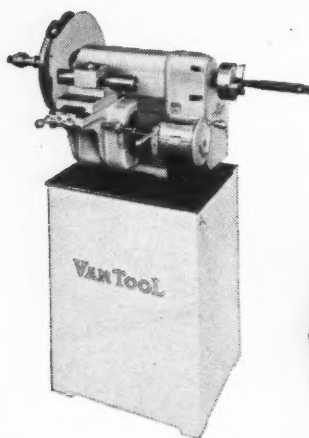
## CHAMP-ITEMS, INC.

6191 Maple Ave., St. Louis 14, Mo.



ORDER FROM  
YOUR JOBBER

## 90% PROFITS FOR YOU!



We'll prove it by putting a VanTool Brake Drum Lathe in your shop for a 30-day FREE TRIAL. NO OBLIGATION . . . Turn the drums on every reline job and guarantee customer satisfaction. Turn 4 drums and charge \$6.00 to \$8.00. Your only cost — 20 minutes labor!

AS LOW AS  
**\$367<sup>25</sup>**

REAMER DRIVE EXTRA

## You'll miss these PROFITS without a **VAN TOOL** *Chatterproof* **BRAKE DRUM LATHE**

TIMKEN BEARING EQUIPPED  
A REAL MACHINE TOOL — Not a Toy  
For Passenger Car and Light Truck Drums

Write or wire NOW about FREE TRIAL OFFER

**VAN TOOL, INC.** 137 N. 22nd ST., PHILADELPHIA 3, PA.  
SERVING THE AUTOMOTIVE TRADE FOR OVER A QUARTER OF A CENTURY



U. S. PAT. #2318842  
GUNK DUNK BENCH Carburetor and Parts Cleaning Kit  
New 6½ gal. size deep "Vapor-catcher" design pail.

*Nothing  
Decarbonizes  
and Cleans  
CARBURETORS,  
FUEL PUMPS,  
PARTS  
Like..*

## GUNK HYDRO-SEAL

**A WORD OF CAUTION**  
If it doesn't bear the Genuine GUNK trademark, it may be a partly diluted imitation — and will not give you the Safety and Advantages of Genuine GUNK and should be flatly refused.

1. Quickly digests and removes carbon gum, paint, lead, makes possible accurate visual inspection and fitting of delicate metering mechanisms, jets and orifices.
2. Lasts more than one year . . . due to Hydro-Seal.
3. Automatic rinsing.
4. Works hot or cold.
5. Guaranteed.

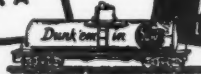
## SOLD BY BETTER JOBBERS EVERYWHERE

(If your jobber doesn't stock Genuine GUNK)

Attached is my business letterhead and check. Ship me:

( ) Kit (with Dipping Screen) 6½ gal. size. Dealer's net cost \$11.80. Shipment by fast prepaid railway express.

**IMMEDIATE DELIVERY**  
1 GALLON OR A  
TANK CAR



**CURRAN CORP.**  
Mfg. Chemists  
LAWRENCE, MASS.





marks the spot

**where more and  
more sales start—**

According to a recent nation-wide survey . . .  
9 out of 10 motorists bought when the purchase  
of a Purolator\* Micronic Oil Filter Refill was  
suggested . . .

## Show motorists WHY ...they'll Buy

Just show the motorist the condition of his filter refill.  
That's usually enough to make the sale.

If the unit is dirty—mucked-up, it's easy to explain  
the harm that abrasive-laden oil can do—the expensive  
repair bills that may ensue—*unless a new Purolator  
Micronic\* refill is installed—at once.*

Why a Purolator Unit? Simply because it is the best  
advertised; *and the best engineered.* A specially designed  
refill takes out particles so tiny they're measured in  
microns (.000039"). An accordion-type construction  
gives up to 10 times the filtering area. And, last but not  
least, it's so built that important additives, other filter  
elements often *take out are left in!*

So push Purolator . . . (1) Use Purolator tie-in mate-  
rial . . . (2) Stock to sell *all* the cars that call.



**And remember:** *Purolators help sell oil. With each  
new filter unit . . . a fresh quart of oil must be added.*

**PUROLATOR PRODUCTS, INC.**  
Rahway, New Jersey and  
Toronto, Ontario, Canada

\*Reg. U. S. Pat. Off.



## Profit-Lifting Jack-Selling Ideas

### IDEA # 1



1. Always carry a Service-Model and a Car-Owner Saf-Lift on the service truck.

2. While you are jacking up the car with your Service-Model Saf-Lift, point out some of its unique features: its high-handle position, which eliminates stooping; its two-leg construction for a sturdier foundation that prevents tipping; its rugged safety-lock bar for extra safety.



3. When lowering the car, show the car owner how safe and simple Saf-Lift works; suggest that he try it himself... point out that he doesn't even have to get his hands dirty.



4. When the tire-changing job is done, show the car owner how Saf-Lift folds up for storage... "neat as an umbrella."

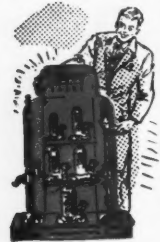


5. Then, if he responds with something like "Boy, that certainly is a handy jack" or "I'd certainly like to have a jack like that"—that's your cue to show him the Car-Owner Model that you carry with you on the service truck—and the sale is as good as "in the bag"!

### IDEA # 2

## Jacks Sell Fast from the *AUSCO SALES JACKER!*

This colorful jack display compactly holds AUSCO'S complete line of hydraulic and mechanical axle and bumper jacks. Standing at one of the "traffic points" in your shop or station, this eye-catching "jack department" lets your customer inspect each jack closely while he's waiting. No time lost... no sales lost... no profits lost! Your AUSCO Jobber will gladly help you choose a Sales-Jacker assortment which will best meet your selling requirements... see him today!



**DID YOU KNOW THAT...** Auto Specialties also manufactures the Lambert "Double-Disc" Brake, which is standard or optional equipment on many makes of tractors and has just been adopted by one of America's leading car factories?







**Blown-out Tire...Blown-out Tempers**  
*another Golden Opportunity*  
*to Sell a SAF-LIFT\* Jack!*

Golden opportunities like this are yours on every emergency tire-changing call! Cash in fully every time, by carrying right on your truck, a Service-Model Saf-Lift for quick lifts and a Car-Owner Saf-Lift for quick profits! Don't be satisfied with just the profits of the service call itself! Take advantage of the Golden Opportunity at the psychological moment . . . when the car owner has just rubbed shoulders with real trouble . . . when he is most likely to realize that he needs the security of a good jack . . . when he is most susceptible to a "quick deal" for a simple, easy-to-operate Saf-Lift Bumper Jack! Folks in trouble appreciate such helpful suggestions . . . thus building more good will for you!

Hundreds of past selling experiences have proved that 90% of your selling job is done, when you demonstrate Saf-Lift . . . once car owners see how wonderfully-easy Saf-Lift works, the sale is usually "in the bag." That's why service calls are one of the Golden Opportunities to sell Saf-Lifts! While the car owner is watching you lift his car safely and simply, without stooping or strenuous effort, he's actually getting a first-hand Saf-Lift demonstration—a demonstration which costs you no extra time or extra effort! Get the "pitch" from the easy-to-follow selling sequence outlined at left. Try it, and see how easy it is to increase your profits on every service call!

**AUSCO** Jacks \* PAT. PEND.

**AUTO SPECIALTIES MFG. CO., ST. JOSEPH, MICHIGAN**  
Other plants at Benton Harbor, Hartford and Windsor, Ont. Canada



*Instead of this . . .*



**BETTER BUY BERNZ  
LP GAS TORCH!**



A mighty mite for man-size jobs. Weighs only 2½ lbs., burns in any position, any time, even at minus 40° F. Complete with pencil flame and utility burners. Slick-as-a-whistle orifice cleans in 30 seconds. Inexpensive cartridge refill at any LP dealer's. **BETTER BUY BERNZ**, only portable torch with ICC approval.

**OTTO  
BERNZ**

**OTTO BERNZ CO., Inc.**

280 LYELL AVE., ROCHESTER 6, N. Y.

TORCHES  
• FIREPOTS •  
MECHANICS TOOLS

## GET RID OF GAS FUMES

**Solve Your Garage and Shop Ventilation  
Problem This Simple Inexpensive Way**

What you have been waiting for—the final, successful solution to your garage ventilation problem all available in a packaged kit, including motor and blower, ready to install.

- Removes gas fumes at source (exhaust pipes).
- Simple installation—no change or alteration of existing facilities.
- Not in your way—instantly in use or out of way when you don't need it.
- Saves man-hours and helps keep employees. Mechanics have less sinus, headaches, etc.

National also makes a complete packaged kit for underfloor installation. Literature on request.

Complete packaged kit  
F.O.B. Decatur

**\$187.50**

Write for circular

Illustration shows standard kit with two extra tube outlets.



Write for circular.

**THE NATIONAL SYSTEM OF GARAGE VENTILATION**

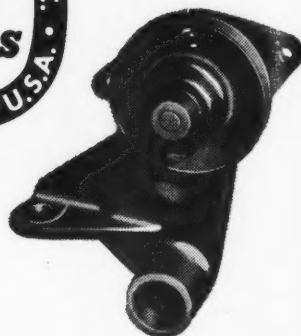
DEPT. 3C, 330 N. CHURCH ST., DECATUR, ILL.

World's Largest Manufacturer of Exclusive Garage Ventilating Equipment.

**PRECISION BUILT FOR AUTOMOTIVE REPLACEMENT**



Linmar Water Pumps are factory duplicates of original equipment . . . Parts are interchangeable with those supplied by the car manufacturers.



The service record of Linmar Water Pumps in the automotive field is unexcelled . . . made possible by the use of the finest materials and engineering skills obtainable . . . plus precision standards of manufacture, exacting inspections, and exhaustive tests.

Write for Catalog 501-LI

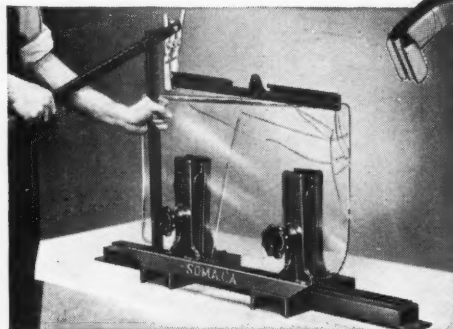


Linmar Division  
**AUTOMATIC STEEL PRODUCTS, INC.**  
CANTON 6, OHIO

AUTOMOBILE JACKS • ONE-END LIFTS • MERCURY CLUTCHES • SPUN STEEL PULLEYS

**Install Glass this Easy Way—**

**SOMACA  
NO-KRAK AUTO-GLASS  
REPLACEMENT TOOLS**



- Eliminate Costly Breakage
- Prevent Damage to Channels
- Save Installation Time

**SIMPLE • QUICK • ECONOMICAL**

Somaca No-Krak Vise, with self-aligning jaws, increases glass salvage, keeps breakage to minimum. "Removing tool" completely adjustable to all sizes of glass. No. 57 Driver fits all style channels, has machined grooves and offset head. It enables getting under flange on channel and driving channel on glass faster—without damage to flange or channel. A pointed end anvil is used for straightening and repairing dented channels.

Write for details

No. 50W  
NO-KRAK  
Self-Aligning  
GLASS VISE  
with CHANNEL  
REMOVER  
and DRIVER No. 57  
**\$3850**

**SOMMER & MACA Glass Machinery Co.**

Automotive Department

3624 SOUTH OAKLEY AVENUE CHICAGO 9, ILLINOIS

# Look What Hudson Has for Dealers in '51!



- ▶ 4 rugged series, priced from just above the lowest!
- ▶ Fabulous new car . . . the Hudson Hornet!
- ▶ Sensational new H-145 high-compression engine!
- ▶ New Skyliner Styling inside and out!

**W**ITH these advantages Hudson dealers cover the market!

From the lower-priced Pacemaker Custom to the fabulous new Hudson Hornet, buyers can pick their price, choose their power!

Whether he's from Main Street or Park Avenue, there's a '51 Hudson to fit your prospect's purse, to fire his imagination . . . and even the *lowest-priced* Hudson brings him the sweet-riding lowness, the marvelous roominess and safety of famous "step-down" design!

Yes, there's your product . . . now here's your deal!

Right now, with retail sales breaking twenty-year records, there are well-located Hudson dealer opportunities open in several areas for men who want action—satisfaction—profits! And remember this—the Hudson deal that's waiting for you is recognized as the fairest in the industry!

Write, wire or phone C. A. J. Hadley, General Sales Manager, Hudson Motor Car Company, Detroit 14, Michigan.

Get in with Hudson and get a deal that's a *real* deal!

# Hudson for '51

**Priced From Just Above the Lowest**

Lower-Priced Pacemaker Custom • Renowned Super-Six Custom • Luxurious Commodore Custom • Fabulous Hudson Hornet



## BE PREPARED

HAVE "SLEETMASTER" PLASTIC  
WINDSHIELD SCRAPERS ON HAND  
FOR THAT NASTY WEATHER JUST  
AROUND THE CORNER

**SELLS ON SIGHT**



FURNISHED  
ONE DOZEN  
PER LARGE  
(14" x 18")  
DISPLAY CARD

IF YOUR JOBBER  
CANNOT SUPPLY  
YOU—SEND  
DIRECT TO—

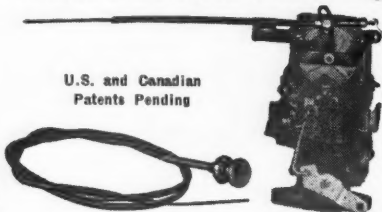
**ARJAY MANUFACTURING CO.**  
VASSAR, MICH.

*Aldo*

have the  
**Spring Loaded  
Device**

**MANUAL CHOKE  
CONVERSION KITS**

U.S. and Canadian  
Patents Pending



- Our patented spring loaded device assures proper carburetor mixture, giving quicker, easier starting. Installs without removing carburetor. Fully guaranteed.

- Also Mfrs. of Complete Line of Universal Hood and Choke Controls.

**Superior Screw  
& Mfg. Co., Inc.**

1924 N. Leamington Chicago 39

**EVERHOT  
UNIFLEX**

SEAMLESS LEAKPROOF

*Bendable* **TAIL PIPES**  
**BUILD MORE SALES  
INCREASE PROFITS**

**EVERHOT PRODUCTS CO.**

2001-9 W. CARROLL AVE. CHICAGO 12, ILLINOIS



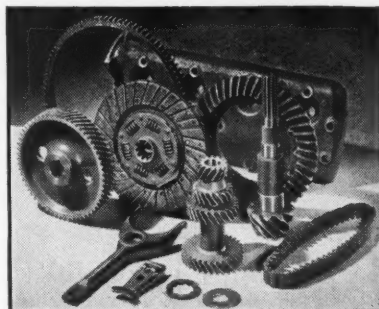
Do a  
**COMPLETE JOB**  
with

*make more  
money, too!*

**RENU**  
*Accurate*  
**CLUTCH SETS**



**PERFECTION  
PARTS**  
are  
*Certified to excel*



**PERFECTION GEAR CO.**  
HARVEY, ILLINOIS

### Classified Advertisements

For Sale: Garage and gas station—large stock of accessories, appliances, tires, grease, tools and equipment. Three-room modern home. Excellent income. 30 years in same place. Retiring. Hartley's Garage, Oak Hill, Ill.

**WANTED: BRIGHT AUTOMOTIVE SPECIALTY SALESMAN.** Sell old established spark plug line direct, garages; truck, fleet owners, viz., bakeries, breweries, milk companies, utilities, municipalities, etc. Repeats like insurance. Application upon request. Reflex Products Company, 780 Union Commerce Bldg., Cleveland, O.

**IGNITION TESTER:** coil-condenser, attractive instrument. Regular \$42.50, closeout \$12.95. Also Battery Tester for storage & flashlight batteries. Regular \$15.00, closeout \$3.50. Modelectric Prod. Corp., Asbury Park, N. J.





**AMKO**  
*Quality*  
AUTOMOTIVE  
REPLACEMENTS



Even though we have government contracts we are still delivering to our utmost ability to our regular jobbers, and we are holding the line on prices wherever possible.

•

**Send for our latest Catalog and price list.**

**AUTOMOTIVE MAN'G Co., Inc.**  
General Offices and Warehouse  
570 W. FULTON ST. CHICAGO 6, ILL.

## Multiply Your PROFITS By Installing *National* Parts

- They Can Be Sold When a Major Repair Can't Be.
- Can Be Installed Before Major Repairs are Needed.
- Fast, Easy Installations . . . You Can Handle More Jobs.

The low-cost, preventive repairs that are possible by using National Parts can be sold easily at the first sign of lubricant leakage, noise and vibration around the "U" joint, ball housing and ball seat.

### For Quick, Low-Cost Repairs DRIVE SHAFT BUSHING & SEAL ASSEMBLIES



CAN BE INSTALLED IN ONE HOUR Without Tearing Down Differential.

Pat. No. 2,403,520

#### SAVES BUYING A NEW DRIVE SHAFT REPAIRS WORN DRIVE SHAFT & SEAL

Assembly driven over shaft flush with end of housing. New front bushing in assembly fits over the "U" joint. Sell with every transmission and "U" joint repair job.

- Provides Greater Bearing Surface.
- Eliminates Oil Leaks from Transmission.
- Prevents Dilution of Differential Lubricant. Due to Transmission Oil Leak.
- Stops Excessive Vibration and Whipping in Drive Shaft Caused by Loose Bearing.
- Enables Repair to be Made Without Replacing Drive Shaft.

#### NOW 6 DIFFERENT BUSHINGS TO FIT ALL MODELS

For most Chev. Cars & Pickups, '30 to '50; Pontiac Cars '33 to '36; most GMC Pickups

#### DRIVE SHAFT HOUSING REPAIR UNIT K-400

Pat. No. 2,405,541

Saves Buying New Drive Shaft Housing. Repairs worn drive shaft housing. For Chev. Cars & Pick-Ups; Most GMC Pick-Ups.

#### "UNIVERSAL" TRANS. CASE BALL SEAT

Saves Cost of a New Trans. Case Assembly. Keeps ball housing in line with drive shaft housing. Chev. Master '29-'50 Cars; Pon. '33-'36; Chev. '29-'50 1/2 & 3/4 Ton Pick-Ups; Most GMC Pick-Ups.

#### UNIVERSAL JOINT BALL HOUSING KITS

Accurately machined, inside and out. Stops excessive wear and vibration between drive shaft housing, ball housing and trans. case. For Most Chev. Cars and Trucks, '29-'50; Most GMC Pick-Ups; Pontiac '33-'36.

SOLD NATIONALLY BY LEADING AUTOMOTIVE WHOLESALERS

Write or wire for complete information. Dept. MA-10



**NATIONAL MACHINE WORKS, INC.**

P. O. BOX 4305

AUTOMOTIVE PARTS MANUFACTURERS

OKLAHOMA CITY 9, OKLA.



**REMARKABLE, NEW!**  
*Keysco* Jack  
**BODY**




Keysco is a 100% mechanical body and fender jack. It is built especially for the modern car. Light, yet strong to handle swiftly and turns out more work per man-hour. Works speedier and easier than any other body jack can even handle...like proof checking front fenders with the hood down, etc.

Pat. Pending

Has exclusive FLEX-STRAPS for mar-proof pulls and twists. FINGER-TIP tool release and adjustment. Exclusive PUSH-PULL GRIPPER CLAMPS.

**FASTEST; FAR LESS FATIGUING**



**3000# PUSH-PULL!**

**MASTER SET**  
only \$76.50 — 33 pieces on portable rack (f. o. b. Oakland)

Ask about the \$49.50 Junior Set

**FOLDER SENT WITHOUT OBLIGATION**  
Shows the many "holds" the Keysco Body & Fender Jack can get on a car. The pictures in this folder prove the superiority of Keysco as a profit maker for you.

**KEYSCO MANUFACTURING CO.**  
1250 East 12th Street, Oakland 4, Calif.

Send name and address of your preferred JOBBER . . . a FREE 10-DAY TRIAL can usually be arranged through your own jobber if you desire. Write today!



**NOW... from 1 SOURCE**

**LEAF SPRINGS  
COIL SPRINGS  
FRONT END PARTS**



Quality Since 1880




Specify TUTHILL and get coil springs and leaf springs skillfully engineered of finest alloy steel, heat treated and tested to insure many years of additional service, on all cars and trucks. Coil springs perfectly matched in pairs.

**Now Available!**  
**FRONT END WHEEL SUSPENSION PARTS**  
A complete line for all cars. Includes coil spring spacers, stabilizer repair kits, upper & lower pivot kits, control arm assemblies, knuckle supports, king pins, etc.  
**Ask your JOBBER**  
OR WRITE FOR CATALOG AND PRICES

**TUTHILL SPRING CO.**  
760 W. POLK ST. • CHICAGO 7

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**Proud Owners of New Cars will buy**

## **WEED-AMERICAN V BAR-REINFORCED TIRE CHAINS**



• No matter how many cars a man has owned—a new car is a new experience, a new enjoyment, a new value that he's determined to protect. So he wants new chains to keep his car free of little bumps when he's battling out of snow-cramped parking spaces—to protect him against serious skid crashes on hard-packed snow and ice.

Here are hundreds of thousands

of alert, prosperous new car owners with an extra, *fresh* reason for buying Weed Chains. They want their bright, brilliant new cars to keep on looking that way. *Sell 'em Weed Chains.*

Remind the man in the older car, too, about replacing or repairing his worn tire chains before snow flies. It's a goodwill gesture and provides a chance to talk new Weed Chain features.

*Confident predictions are now made for 5,000,000 new cars for 1950. Some expect more.*

As this is written the auto industry's September quota of 545,000 cars seems certain to be met. Some authorities predict an all-time record output in 1950 of 6,000,000 cars. This would shatter the famous car production record of 1929—and furnish you dealers with the greatest new car market for Weed Chains ever known.

### **Order Now—Don't Miss Out on Profitable Sales!**

*Millions of dollars have been lost in the past by dealers who neglected to order their Weed Chains in advance. Don't you lose Weed profits this year. Order now.*

**WEED-AMERICANS  
REALLY GRIP—even  
on hard-packed snow or ice**

**They're PAIRED!**  
**V BARS SLANTED**  
**LEFT AND RIGHT**  
**Hold BOTH Ways**  
**Prevent Side Skid**

**ACCO**

York, Pa., Atlanta, Chicago, Denver, Detroit, Los Angeles, New York, Philadelphia, Pittsburgh, Portland, San Francisco, Bridgeport, Conn.

**AMERICAN CHAIN DIVISION  
AMERICAN CHAIN & CABLE**



*In Business for Your Safety*



**1 CHECK ALL LIGHTS  
ON EVERY CAR LEFT  
FOR CHANGEOVER!**

**2 MARK ALL BURN-  
OUTS ON HANDY SNAP-  
ON MEMO CARD!**



# 1-2 sales punch helps dealers cash-in on G-E Fall auto lamp promotion!

*Let these General Electric sales aids help you get going NOW!*



*Advertising in Post and Collier's (starts October 21)*



*Point-of-sale Materials (order from your G-E lamp supplier)*

**"All-glass" headlamps give MOST LIGHT WHEN NEW . . . MOST LIGHT THROUGHOUT LIFE**

**GENERAL  ELECTRIC**

*Here's the Better Way  
to Sell Customers on letting  
You "Do the Job Right"*



**...doing the Job Right is the right way  
to increase sales on  
carburetion...ignition...cooling...parts and service!**

So your customers are from Missouri and have to be shown why it pays them to get their job done right! That's one of the advantages of the Ramco RE-POWERING Plan. It makes it easier to sell a better job. It gives you the ammunition to back up your recommendations. It gives you 4 sales programs in one. So instead of running separate ignition campaigns, separate compression, carburetion or cooling campaigns you PROMOTE ALL 4 with one campaign!

See your Ramco Jobber about GETTING THE RAMCO RE-POWERING SIGN up. Start cashing in on 10,000 MILE\* GUARANTEED RING JOBS...RAMCO NATIONAL ADVERTISING in Post and Collier's. Get a RE-POWERING "REP" for Doing the Job Right by installing Ramco All-Purpose 10-Up Piston Rings *exclusively!* Ramsey Corporation, St. Louis, Missouri.

\*or one year



The 10,000 MILE GUARANTEE CARD  
gives used car buyers assurance  
of a RE-POWERING Job  
that's done right



**POST**

**Collier's**

millions are being urged to look for the RE-POWERING SIGN through ads in

**"...A new  
tool cabinet,  
thanks to Thermoid"**



Last Spring I talked with Red, my jobber salesman, about preparing for the vacation business that starts when motorists get out on the road to go places. I told him I wanted fast-moving lines...not stuff that gathered dust and tied up my money.

Red said that, if I felt that way, I should start by cleaning out my slow-moving, single-purpose fan belts. He showed me how the Thermoid Line could give me complete car, truck and tractor coverage with less inventory. I told him it was okay to go ahead.

They re-sleeved my stock...set up a uniform numbering system...put up a Thermoid Display Rack. Thermoid's handy belt flipper and convenient wall chart helped me get my customers in and out in half the time it used to take.

Red was right! By switching to Thermoid, I was able to get rid of my dead stock of special fan belts and build up a nice business with a balanced inventory. I was even able to afford a new tool cabinet.

Thanks to Thermoid.

Get in touch with your Thermoid Distributor and tie-up with the line that doesn't tie-up your money in slow moving items.

One Line...The Top Quality Line

# Thermoid

Brake Linings • Fan Belts • Radiator Hose • Hydraulic  
Brake Parts and Fluid • Car Mats • Clutch Facings •  
Thermoid Precision Process Equipment

Thermoid Company, Trenton, New Jersey